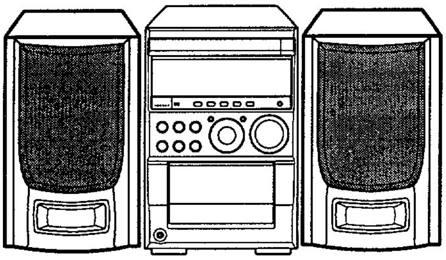
aiwa

aiwa SERVICE

XR-M55
XR-M56
XR-M57



COMPACT DISC STEREO SYSTEM

- BASIC TAPE MECHANISM : 2ZM–1 YR9NC
- BASIC CD MECHANISM : 3ZG–3 E3NC
- TYPE: 55: D,U,LH,HR,K
  56: EZ, 57: EZ

製品コード：8ZCL6 - 0137(S)

SERVICE MANUAL

S/M Code No. 09–996–408–2R1

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SPECIFICATIONS (U, LH, HR, EZ, K)

<FM Tuner section>

Tuning range	87.5 MHz to 108 MHz
Usable sensitivity(IHF)	U, LH, HR: 13.2 dBf EZ, K: 16.8 dBf
Antenna terminals	75 ohms (unbalanced)

<AM / MW Tuner section>

Tuning range	530 kHz to 1710 kHz (10 kHz step) 531 kHz to 1602 kHz (9 kHz step)
Usable sensitivity	350 μV/m
Antenna	Loop antenna

<LW Tuner section>(EZ, K ONLY)

Tuning range	144 kHz to 290 kHz
Usable sensitivity	1400 μV/m
Antenna	Loop antenna

<Amplifier section>

Mid-high frequency amplifier	
Power output	LH, HR: 10 W + 10 W (1 kHz, T.H.D. 10 %, 6 ohms) 8 W + 8 W (1 kHz, T.H.D. 1 %, 6 ohms) U: 8 W + 8 W (200 Hz - 20 kHz,T.H.D. less than 1 %, 6 ohms) EZ, K: 8 W + 8 W (6 ohms, T.H.D. 1 %, 1 kHz/DIN 45500) 10 W + 10 W (6 ohms, T.H.D. 10 %, 1 kHz/DIN 45324)
Total Harmonic distortion	U, LH, HR, EZ, K: 0.15 % (5 W, 1 kHz, 6 ohms,DIN AUDIO) EZ, K: DIN MUSIC POWER: 19.5 W + 19.5 W
Low frequency amplifier	
Power output	U: 22 W + 22 W (35 Hz - 200Hz, T.H.D. less than 1 %, 6 ohms) LH, HR: 25 W + 25 W (75 Hz, T.H.D. 10 %, 6 ohms) 20 W + 20 W (75 Hz, T.H.D. 1 %, 6 ohms) EZ, K: 25 W + 25 W (6 ohms,T.H.D. 10 %, 75 Hz/DIN 45324) 20 W + 20 W (6 ohms,T.H.D. 1 %, 75 Hz/DIN 45500)
Total Harmonic distortion	U, LH, HR, EZ, K: 0.15 % (12.5 W, 75 Hz, 6ohms,DIN AUDIO) EZ, K: DIN MUSIC POWER: 62 W + 62 W
Inputs	LH: VIDEO/AUX: 0.4 V U, HR, EZ. K: VIDEO/AUX: 0.4 V MD: 0.4 V
Outputs	LINE OUT: 150 mV (47 kohms load) SPEAKERS HIGH FREQ: accepts speakers of 6 ohms or more SPEAKERS LOW FREQ: accepts speakers of 6 ohms or more PHONES (stereo mini jack): accepts headphones of 32 ohms or more

<Cassette deck section>

Track format	4 tracks, 2 channels stereo
Frequency response	Normal tape: 50 Hz –15000 Hz CrO_2 tape: 50 Hz –16000 Hz
Signal-to-noise ratio	50 dB (CrO_2 tape peak level above 1kHz)
Recording system	AC bias
Heads	Recording/playback head X 1 Erase head x 1

<Compact disc player section>

Laser	Semiconductor laser (λ =780 nm)
D-A converter	1 bit dual
Signal-to-noise ratio	75 dB (1 kHz, 0 dB)
Harmonic distortion	0.1 % (1 kHz, 0 dB)
Wow and flutter	Unmeasurable

<General>

Power requirements	U: AC: 120 V, 60 Hz LH, HR: AC: 120/220 V ~ 240 V, 50/60 Hz EZ, K: AC: 230 V, 50 Hz
Power consumption	U: 75 W LH, HR, EZ, K: 80 W
Dimensions of main unit (W x H x D)	175 x 259 x 292 mm (7 x $10\frac{1}{4}$ x $11\frac{1}{2}$ in.)
Weight of main unit	5.5 kg (12 lbs 2 oz.)

<Speaker system>

Cabinet type	3 way, built in subwoofer (magnetic shield type)
Speakers	SubWoofer: 130 mm ($5\frac{1}{8}$ in.) cone type Full range: 100 mm (4 in.) cone type Super tweeter: 20 mm ($\frac{13}{16}$ in.) ceramic type
Impedance	6 ohms / 6 ohms
Output sound pressure level	86 dB/W/m
Dimensions (W x H x D)	165 x 260 x 265 mm ($6\frac{1}{2}$ x $10\frac{1}{4}$ x $10\frac{1}{2}$ in.)
Weight	4.1 kg (9 lbs 1 oz.)

- Design and specifications are subject to change without notice.

SPECIFICATIONS (D)

チューナー部

＜FM部＞

受信周波数：　76MHz – 108MHz
アンテナ：　75Ω(不平衡)

＜AM部＞

受信周波数：　531kHz – 1602kHz
アンテナ：　ループアンテナ

＜タイマー部＞

プログラムタイマー：　オンタイマー、任意に設定可
スリープタイマー：　5分単位で設定可、最大240分
時計表示：　12時間/24時間表示

アンプ部

定格出力：　中高音域アンプ部：
10W + 10W(1kHz、6Ω、10%)EIAJ
低音域アンプ部：
25W + 25W(75Hz、6Ω、10%)EIAJ
入力端子：　VIDEO/AUX端子　400mV
MD端子　400mV
出力端子：　LINE OUT端子　150mV
SPEAKERS端子　6Ω
PHONES端子　32Ω
OPTICAL OUT端子

カセットデッキ部

トラック方式：　4トラック2チャンネル
周波数特性：　ハイポジションテープ 50 – 16000Hz
ノーマルテープ 50 – 15000Hz

CDプレーヤー部

ディスク：　コンパクトディスク
読み取り方式：　非接触光学式読み取り(半導体レーザー使用)
復号化：　1bit デュアル
ワウ　フラッター：　測定限界以下

共通部

電源：　AC 100V、50/60Hz
消費電力：　62W
待機消費電力：　1.4W(省電力モードONのとき)
本体最大外形寸法：　175(幅) × 259(高) × 292(奥行) mm
本体質量：　5.5kg

スピーカー

形式：　3ウェイバスレフタイプ(防磁型：EIAJ)
インピーダンス：　6Ω/6Ω
出力音圧レベル：　86dB/W/m
使用スピーカー：　サブウーハー　13cm　フルレンジ　10cm
スーパーツイーター　2cm
最大外形寸法：　165(幅) × 260(高) × 265(奥行) mm
質量：　4.1kg

- **外観及び仕様は予告なく変更する場合があります。**

PROTECTION OF EYES FROM LASER BEAM DURING SERVICING

This set employs laser. Therefore, be sure to follow carefully the instructions below when servicing.

WARNING!!

WHEN SERVICING, DO NOT APPROACH THE LASER EXIT WITH THE EYE TOO CLOSELY. IN CASE IT IS NECESSARY TO CONFIRM LASER BEAM EMISSION. BE SURE TO OBSERVE FROM A DISTANCE OF MORE THAN 30cm FROM THE SURFACE OF THE OBJECTIVE LENS ON THE OPTICAL PICK-UP BLOCK.

- Caution: Invisible laser radiation when open and interlocks defeated avoid exposure to beam.
- Advarsel: Usynlig laserståling ved åbning, når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling.

VAROITUS!

Laiteen Käyttäminen muulla kuin tässä käyttöohjeessa mainitulla tavalla saattaa altistaa käyt-täjän turvallisuusluokan 1 ylittävälle näkymättömälle lasersäteilylle.

VARNING!

Om apparaten används på annat sätt än vad som specificeras i denna bruksanvising, kan användaren utsättas för osynling laserstrålning, som överskrider gränsen för laserklass 1.

CAUTION

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

ATTENTION

L'utilisation de commandes, réglages ou procédures autres que ceux spécifiés peut entraîner une dangereuse exposition aux radiations.

ADVARSEL!

Usynlig laserståling ved åbning, når sikkerhedsafbrydereer ude af funktion. Undgå udsættelse for stråling.

This Compact Disc player is classified as a CLASS 1 LASER product.

The CLASS 1 LASER PRODUCT label is located on the rear exterior.

CLASS 1	LASER PRODUCT
KLASSE 1	LASER PRODUKT
LUOKAN 1	LASER LAITE
KLASS 1	LASER APPARAT

Precaution to replace Optical block / 光学ブロック交換時の注意

(KSS – 213F)

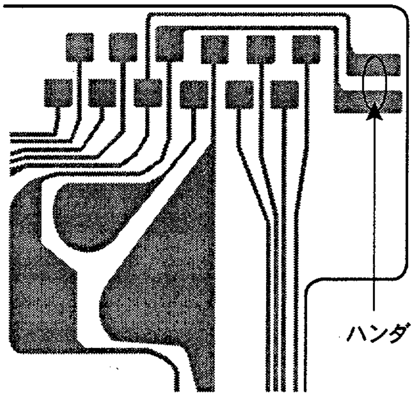
Body or clothes electrostatic potential could ruin laser diode in the optical block. Be sure ground body and workbench, and use care the clothes do not touch the diode.

1) After the connection, remove solder shown in right figure.

光学系ブロック内のレーザーダイオードは、衣服や人体に帯電した静電荷等で電位差を生じることにより、静電破壊することがあります。人体アース、作業台のアースをとり、衣服が触れぬよう注意して下さい。

1）コネクターを接続後、右図に示すハンダ付けを取り除いて下さい。

PICK-UP Assy P.C.B



製品を安全に修理（補修）するために

修理の前に「製品を安全に修理（補修）するために」をよくお読みの上、正しく修理を行ってください。このサービスマニュアルでは、お客様が製品を安全に正しくお使いいただき、お客様や他の人々への危害や財産への損害を未然に防止するために、修理する場合必ず下記の項目をお守りください。

⚠警告

**警告に示された次の内容を必ずお守りください。
もし守られないと、火災や感電、けがなどの重度の損害を負う原因となります。**

1.⚠安全規格部品注意文
製品の安全性を維持する為の重要部品で、安全上特別な規格で作られています。このマークの部品を交換する時は必ず指定の部品を使用してください。

2.指定部品を使用すること。
セットの部品は難燃性や耐電圧など安全上の特性を持ったものとなっています。従って交換部品は、使用されていたものと同じ特性の部品を使用してください。特に回路図、部品表に⚠印で指定されている安全上重要な部品は必ず指定のものをご使用ください。

3.電源コードを含むＡＣ1次側のリード線の被覆を傷つけたり、溶かしたりしないこと。

4.感電に注意すること。
内部には高電圧の部分がありますので通電時の取り扱いに際しては注意してください。

5.次の各項目は必ず修理前と同じ状態にすること。
1）ワイヤーの半田付け状態（特にＡＣ1次側の空間距離）
2）ワイヤーの引き回しおよび束線状態等
3）ワイヤーの種類
4）各種絶縁物の取付状態

6.部品の取り付けや配線の引き回しはもとどおりにすること。
安全上、チューブやテープなどの絶縁材料を使用したり、プリント基板から浮かしてとりつけた部品があります。また、内部配線は引き回しやクランパーによって発熱部品や高圧部品に接近しないよう配慮されていますのでこれらは必ずもとどおりにしてください。

⚠注意

この表示を無視して、誤った取り扱いをすると、人が傷害を負ったり物的損害が発生する可能性があります。

1.注意事項を守ること。
サービスの時、特に注意を要する箇所については、キャビネット、シャーシ、部品などにラベルや捺印で注意事項を表示しています。これらの注意書きおよび取扱説明書等の注意事項を必おず守りください。

2.スペック銘板・注意ラベル・ヒューズラベル等の表示文字を汚して読みにくくしないこと。

3.基板パターンの裏付け部品の修理等を行う場合、パターンや部品に指定のボンドを塗布してプリント基板にしっかり固定すること。

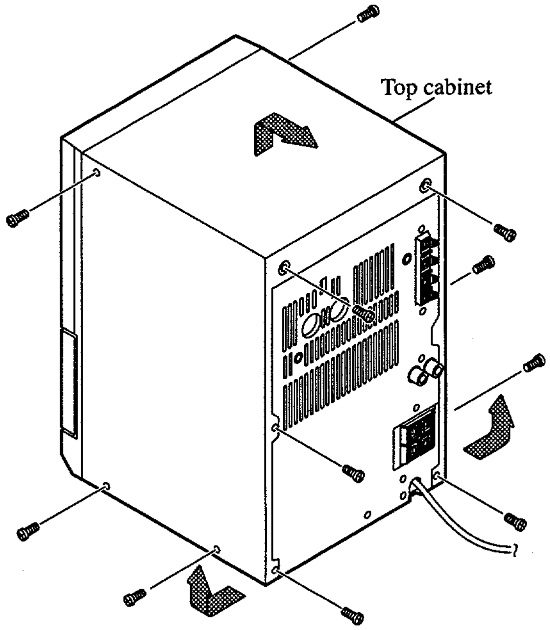
4.サービス後は安全点検すること。
サービスのために取り外したネジ、部品、配線がもとどおりになっているか、サービスした個所の周辺で劣化させてしまったところがないかなどを点検してください。（ワイヤー半田付け、引き回し、束線、種類、空間距離）

5.修理（補修）時に、レーザー出力部に接近しないこと。
やむなく接近する場合は、目を閉じてください。レーザービームに接近することが必要になった場合、光学ピックアップブロックの対物レンズの表面から30cm以上離れていることを確認してください。

DISASSEMBLY INSTRUCTIONS (U, LH, HR, EZ, K)

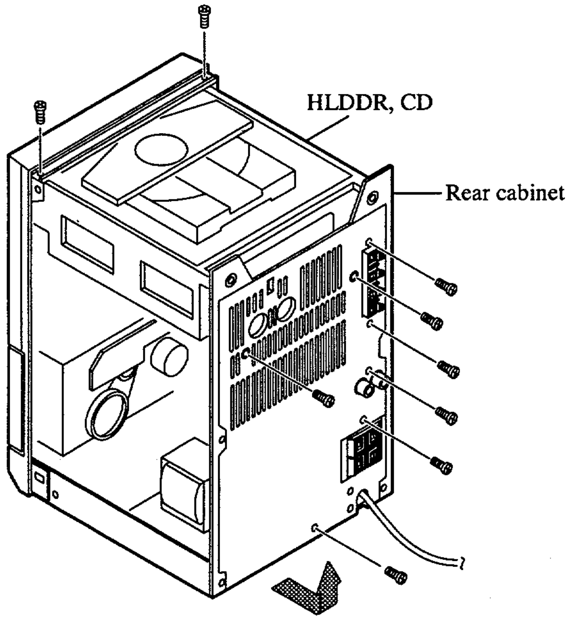
(A) HOW TO REMOVE THE TOP CABINET

1. Remove 6 screws from both sides of the cabinet.
2. Remove 5 screws from the rear.
3. Remove the top cabinet in the direction of arrows.


Top cabinet

(B) HOW TO REMOVE THE CD SECTION

1. Remove all the screws on the rear cabinet and remove the rear cabinet in the direction of the arrow.
2. Remove 2 screws from the top of the HLDR, CD.


HLDDR, CD
Rear cabinet

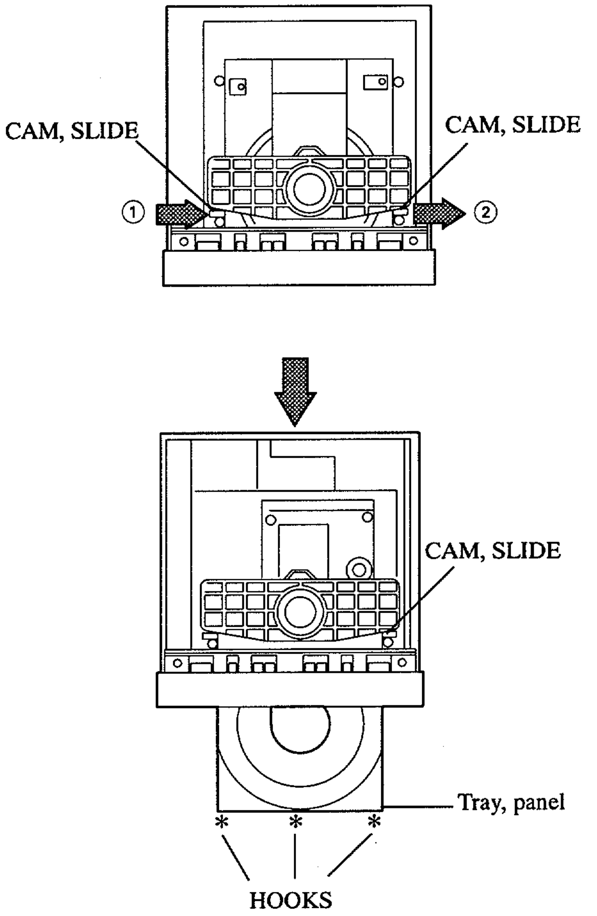
3. Open the CD tray to remove its tray panel.

* To open the CD tray, push the CAM, SLIDE inwards as arrow ① and pull it out from the other side as in arrow ②.

* Pull out the tray to remove its panel " * " positions marked the hook at the bottom side of the tray panel.

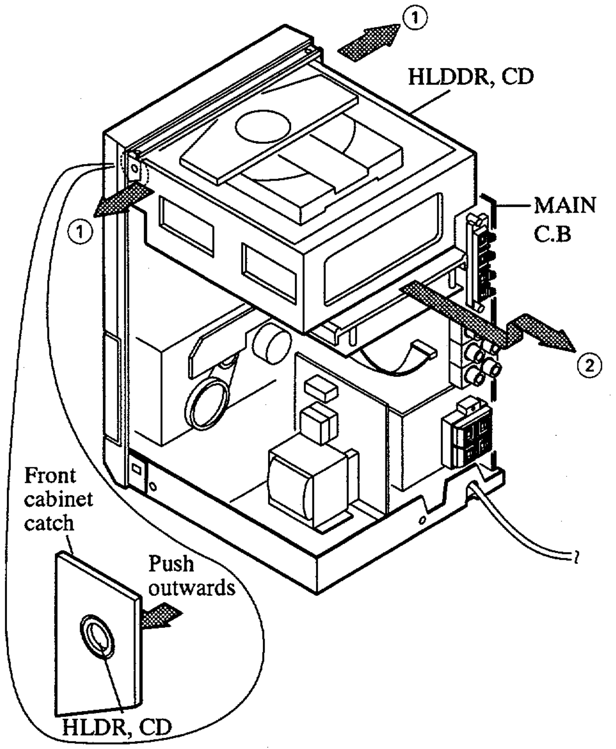
* After removed, close back the tray.

Top view


CAM, SLIDE
CAM, SLIDE
①
②
CAM, SLIDE
Tray, panel
*
*
*
HOOKS

4. Push the catches of the front cabinet outwards in the direction of arrows ① to remove the HLDR, CD on both sides.
   * Caution: During the removal, ensure the CD cables are stressed-free.

5. Remove the HLDR, CD as shown in arrow ② .


①
HLDDR, CD
MAIN C.B
①
②
Front cabinet catch
Push outwards
HLDR, CD

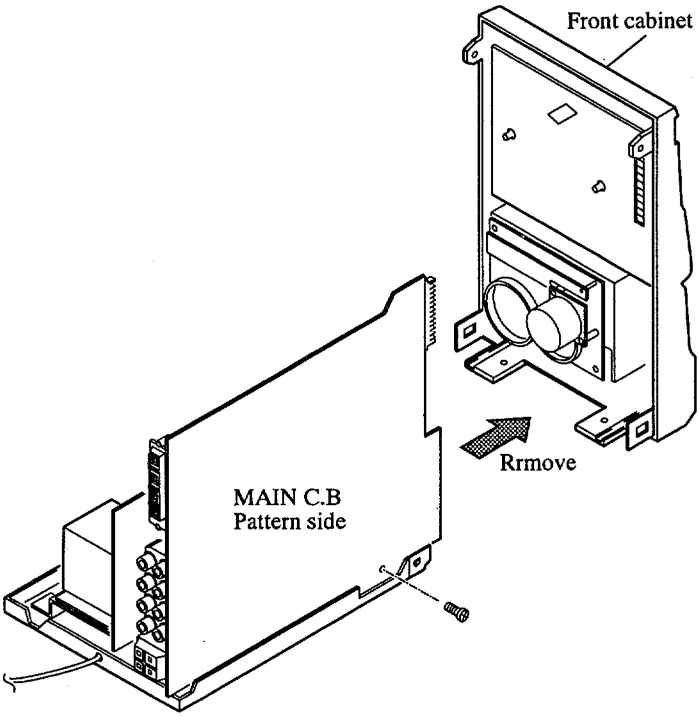
(C) HOW TO REMOVE THE MAIN C.B

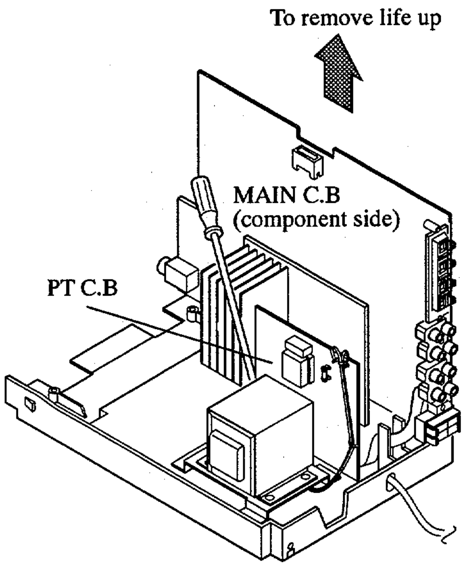
1. Remove the Front cabinet.
   * Caution: All connectors to the MAIN C.B must be remove before removing the Front cabinet.

2. Remove one screw on the pattern side of the MAIN C.B.

3. On the component side, tilt to insert a screw driver to remove a screw under the PT C.B. on the heat sink

4. Left the MAIN C.B up to remove.

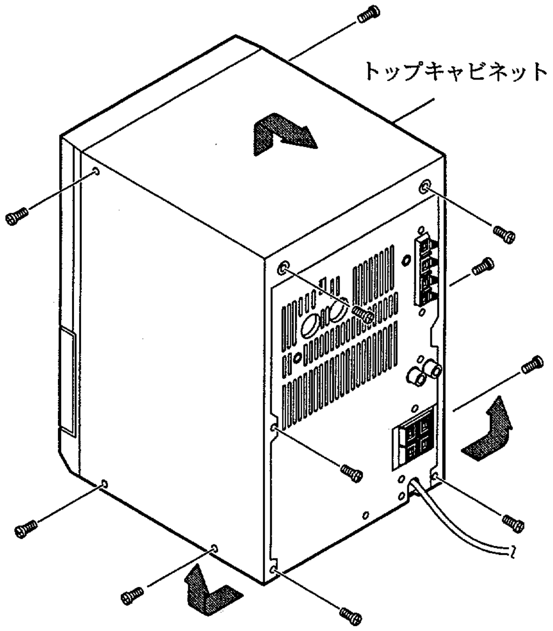

Front cabinet
Rrmove
MAIN C.B
Pattern side


To remove life up
MAIN C.B
(component side)
PT C.B

DISASSEMBLY INSTRUCTION

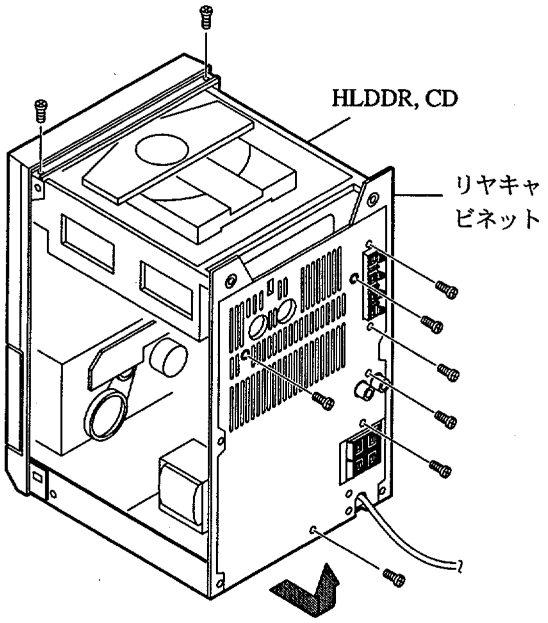
(A) トップキャビネットの取り外し

1. キャビネットの両側から６つのビスをはずす。
2. 後部から、５つのビスをはずす。
3. 矢印の方向へトップキャビネットをはずす。

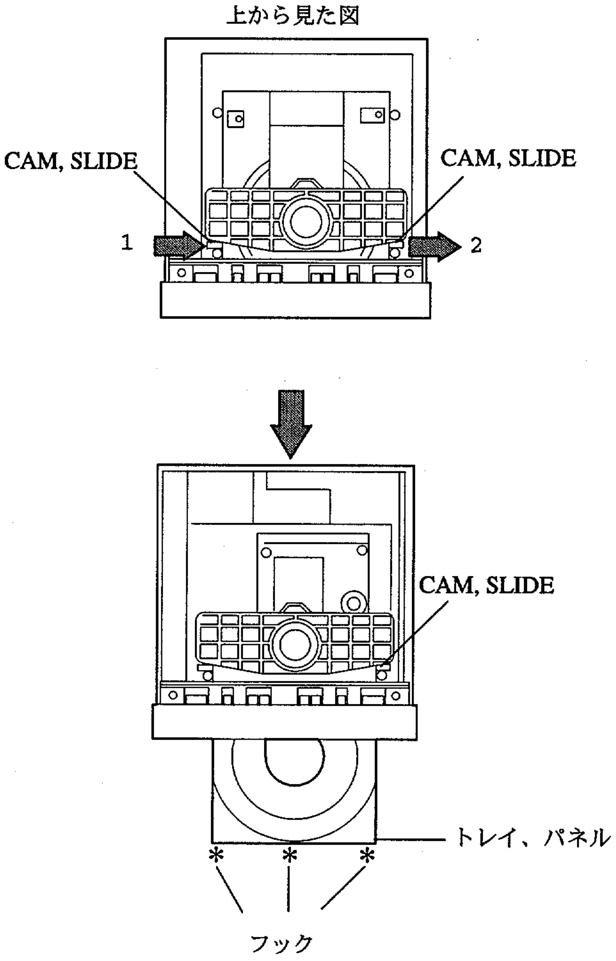


(B) CD部の取り外し

1. リヤキャビネットについている全てのネジを取り外し、矢印の方向にキャビネットをはずす。
2. HLDR. CDのトップから２つのネジをはずす。

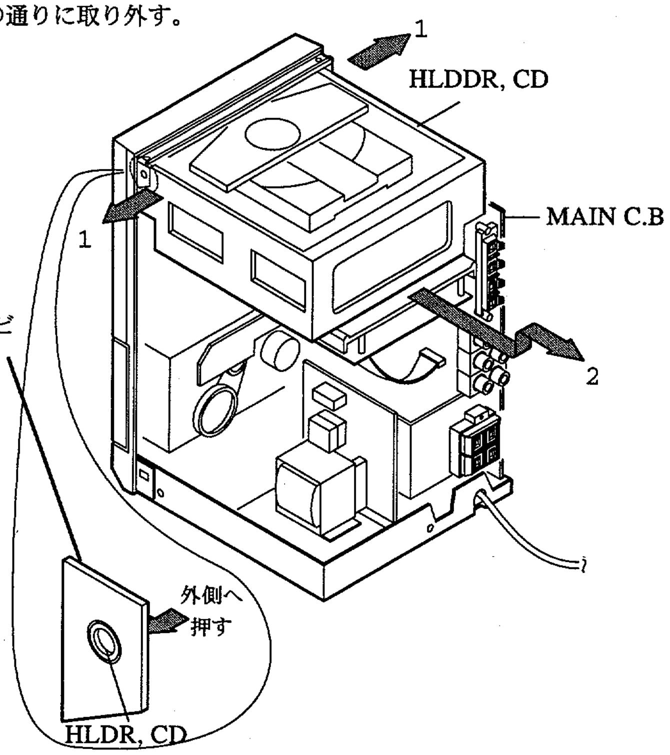

HLDDR, CD
リヤキャ
ビネット

3. CDトレイを開けて、トレイパネルをはずす。
   - * CDトレイを開けるには、CAM. SLIDEを矢印①のとおり内側に押し、矢印②の方向へはずす。
   - * トレイを引き、トレイパネルの底側のフック（＊位置）をはずす。
   - * 取り外し終わったら、トレイを閉める。


上から見た図
CAM, SLIDE
CAM, SLIDE
1
2
CAM, SLIDE
トレイ、パネル
＊
＊
＊
フック

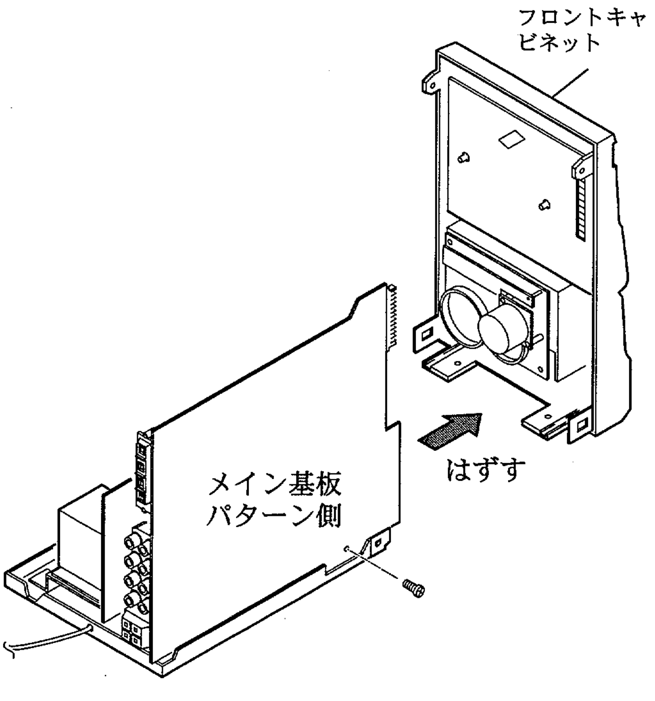
へ押し、両側にあるHLDR. CDを取り外す。
＊ 注意：取り外し作業中、CDに接続されているケーブルに注意すること。

5. HLDR. CDを、矢印②の通りに取り外す。


1
HLDDR, CD
MAIN C.B
1
フロントキャビネット止め金
2
外側へ押す
HLDR, CD

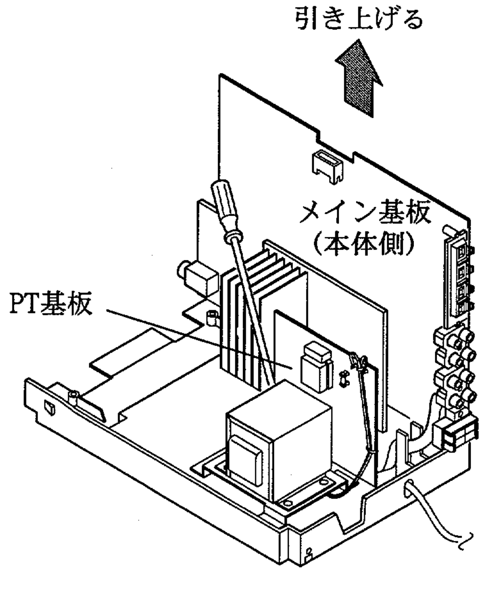
(C) メイン基板の取り外し

1. フロントキャビネットをはずす。
＊ 注意：コネクターは、フロントキャビネットを取り外す前に全てはずしておくこと。


フロントキャビネット
メイン基板パターン側
はずす

2. メイン基板のパターン側にある１つのビスをはずす。
3. 本体側で、ドライバーを傾けながら差し込み、ヒートシンクのPT基板の下にあるビスをはずす。

4. メイン基板を引き上げる。


引き上げる
メイン基板
(本体側)
PT基板

ELECTRICAL MAIN PARTS LIST

If can't understand for Description please kindly refer to " REFERENCE NAME LIST ".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
IC			
	87-A20-446-010	1E	C-IC,LA9241ML
	87-A20-459-010	2A	C-IC,LC78622ED
	87-A20-157-010	1E	IC,TA2092N
	87-020-903-010	1B	IC,NJM7805FA
	87-001-982-010	1B	IC,TA7291S
	8Z-CL7-685-010	1H	C-IC,M38B57MCH-P226FP
	87-017-889-010	1A	IC,NJM4558LD
	87-A20-914-010	1B	IC,SPS-442-1-F
	87-001-596-010	1B	IC,NJM4580L
	87-A21-111-040	1C	C-IC,M62495FP
	87-070-127-110	1C	IC,LC72131 D
	87-A20-913-010	1D	IC,LA1837NL
	87-A20-440-040		C-IC,BU1920FS<EZ>
	87-070-060-040	1F	IC,TA2040AF<D>
	87-020-454-040	1A	IC,DN6851
TRANSISTOR			
	87-026-463-080	0E	TR,2SA933S (0.3W)
	87-026-297-080	0E	TR,DTA144TK
	87-026-223-080	0E	TR,DTC143TK
	89-109-521-080	0E	TR,2SA952K
	89-318-155-080	0E	TR,2SC1815GR
	87-026-610-080	0E	TR,KTC3198GR
	89-213-702-010	1A	TR,2SB1370 (1.8W)
	89-333-317-080	0E	TR,2SC3331 (0.5W)
	87-A30-196-080	0E	TR,2SC4115SRS
	89-113-184-080	0E	TR,2SA1318T
	87-A30-076-080	0E	C-TR,2SC3052F
	87-A30-075-080	0E	C-TR,2SA1235F
	87-026-211-080	0E	TR,DTA144EK
	87-A30-039-040	0E	C-TR,2SD1383K
	87-A30-215-010	1B	TR,2SD2025
	87-A30-214-010	1B	TR,2SB1344
	87-026-219-080	0E	TR,DTA144ES (0.3W)
	87-026-609-080	0E	TR,KTA1266GR
	87-A30-268-040	0E	C-TR,2SA1514K(S)
	87-A30-074-080	0E	C-TR,RT1P 141C
	87-A30-257-080	0E	C-TR,2SD1306E
	87-026-245-080	0E	TR,DTC114ES
	89-112-965-080	0E	TR,2SA1296GR
	89-327-125-080	0E	CHIP TR,2SC2712GR
	87-A30-087-080	0E	C-FET,2SK2158
	89-111-624-080	0E	TR,2SA1162Y
	87-A30-197-080	0E	TR,KTA1267GR
	87-A30-090-080	0E	FET,2SK2541
	87-026-235-080	0E	CHIP-TR,DTC114EK
	87-026-218-080	0E	TR,DTC144ES (0.2W)
	87-A30-127-010	1A	TR,2SD2478
	87-A30-126-010	1A	TR,2SB1616
	87-026-210-080	0E	CHIP-TR,DTC144EK
	87-026-239-080	0E	TR,DTC114TK (0.2W)
	89-327-143-080	0E	TR,2SC27140
	87-A30-072-080	0E	C-TR,RT1P 144C
	87-026-226-080	0E	CHIP-TR,DTA143EK<D>
	89-505-434-540		C-FET,2SK543-TB(4/5)<K,EZ>
DIODE			
	87-020-465-080	0E	DIODE,1SS133 (110MA)
	87-020-027-080	0E	CHIP-DIODE 1SS184
	87-070-022-010	0E	DIODE,IN5402 (RECT)
	87-A40-345-080	0E	ZENER,MTZJ10C
	87-A40-455-080	0E	DIODE,RL203 GW
	87-A40-455-090	0E	DIODE,RL203 GW
	87-A40-341-080	0E	ZENER,MTZJ 36 A
	87-A40-553-080	0E	DIODE,1N4003 SEM
	87-017-931-080	0E	ZENER,MTZJ5.6B
	87-A40-466-080	0E	ZENER,MTZJ2.7A

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
	87-A40-234-080	0E	ZENER,MTZJ5.6A
	87-A40-270-080		C-DIODE,MC2838<K,EZ>
MAIN C.B			
C101	87-010-399-090	1B	CAP,E 3300-35 SME
C102	87-010-398-090	1B	CAP,E 2200-35V
C104	87-010-197-080	0E	CAP, CHIP 0.01 DM
C105	87-012-140-080	0E	CAP 470P
C106	87-010-408-080	0E	CAP, ELECT 47-50V
C107	87-010-384-080	0E	CAP, ELECT 100-25V
C108	87-010-381-080	0E	CAP, ELECT 330-16V
C113	87-010-403-080	0E	CAP, ELECT 3.3-50V
C114	87-010-374-080	0E	CAP, ELECT 47-10V
C115	87-A10-712-080	0E	C-CAP,S 0.22-50 Z F
C116	87-A10-712-080	0E	C-CAP,S 0.22-50 Z F
C131	87-A10-712-080	0E	C-CAP,S 0.22-50 Z F
C132	87-A10-712-080	0E	C-CAP,S 0.22-50 Z F
C133	87-012-368-080	0E	C-CAP,S 0.1-50 F
C134	87-012-368-080	0E	C-CAP,S 0.1-50 F
C141	87-A10-011-090	2A	CAP,E 2200-25 SMG
C142	87-A10-011-090	2A	CAP,E 2200-25 SMG
C151	87-010-178-080	0E	CHIP CAP 1000P
C152	87-010-178-080		CHIP CAP 1000P<U>
C203	87-010-187-080	0E	CAP CHIP S5600P
C204	87-010-187-080	0E	CAP CHIP S5600P
C209	87-010-546-080	0E	CAP, ELECT 0.33-50V
C210	87-010-546-080	0E	CAP, ELECT 0.33-50V
C211	87-010-403-080	0E	CAP, ELECT 3.3-50V
C212	87-010-403-080	0E	CAP, ELECT 3.3-50V
C213	87-010-260-080	0E	CAP, ELECT 47-25V
C214	87-010-260-080	0E	CAP, ELECT 47-25V
C217	87-010-993-080	0E	C-CAP,S 0.056-25 B
C218	87-010-993-080	0E	C-CAP,S 0.056-25 B
C219	87-010-196-080	0E	CHIP CAPACITOR,0.1-25
C220	87-010-196-080	0E	CHIP CAPACITOR,0.1-25
C221	87-010-187-080		CAP CHIP S5600P<K,EZ>
C222	87-010-187-080		CAP CHIP S5600P<K,EZ>
C223	87-010-186-080	0E	CAP,CHIP 4700P
C224	87-010-186-080	0E	CAP,CHIP 4700P
C225	87-010-322-080	0E	C-CAP,S 100P-50 CH
C226	87-010-322-080	0E	C-CAP,S 100P-50 CH
C229	87-A10-946-080	0E	C-CAP,S 220P-100 J CH
C230	87-A10-946-080	0E	C-CAP,S 220P-100 J CH
C231	87-010-260-080	0E	CAP, ELECT 47-25V
C232	87-010-401-080	0E	CAP, ELECT 1-50V
C233	87-010-263-080	0E	CAP, ELECT 100-10V
C234	87-010-380-080	0E	CAP, ELECT 47-16V
C262	87-010-197-080	0E	CAP, CHIP 0.01 DM
C274	87-010-322-080		C-CAP,S 100P-50 CH<K,EZ>
C275	87-010-322-080		C-CAP,S 100P-50 CH<K,EZ>
C276	87-010-178-080		CHIP CAP 1000P<K,EZ>
C285	87-010-400-080	0E	CAP, ELECT 0.47-50V
C286	87-010-400-080	0E	CAP, ELECT 0.47-50V
C287	87-010-196-080	0E	CHIP CAPACITOR,0.1-25
C288	87-010-196-080	0E	CHIP CAPACITOR,0.1-25
C303	87-010-177-080	0E	C-CAP,S 820P-50 SL
C304	87-010-177-080	0E	C-CAP,S 820P-50 SL
C307	87-010-263-080	0E	CAP, ELECT 100-10V
C308	87-010-263-080	0E	CAP, ELECT 100-10V
C311	87-010-195-080	0E	C-CAP,S 0.068-25 F
C312	87-010-195-080	0E	C-CAP,S 0.068-25 F
C313	87-010-186-080	0E	CAP,CHIP 4700P
C314	87-010-186-080	0E	CAP,CHIP 4700P
C315	87-010-374-080	0E	CAP, ELECT 47-10V
C317	87-010-546-080	0E	CAP, ELECT 0.33-50V
C318	87-010-546-080	0E	CAP, ELECT 0.33-50V
C321	87-010-405-080	0E	CAP, ELECT 10-50V
C340	87-010-197-080		CAP, CHIP 0.01 DM<K,EZ>
C349	87-010-322-080		C-CAP,S 100P-50 CH<K,EZ>

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C350	87-010-322-080		C-CAP,S 100P-50 CH<K,EZ>
C361	87-010-374-080	0E	CAP, ELECT 47-10V
C362	87-010-401-080	0E	CAP, ELECT 1-50V
C381	87-010-178-080		CHIP CAP 1000P<K,EZ>
C384	87-012-156-080	0E	C-CAP,S 220P-50 CH
C386	87-010-197-080		CAP, CHIP 0.01 DM<K,EZ>
C393	87-010-178-080		CHIP CAP 1000P<K,EZ>
C401	87-010-401-080	0E	CAP, ELECT 1-50V
C402	87-010-401-080	0E	CAP, ELECT 1-50V
C403	87-010-321-080	0E	CHIP CAPACITOR,82P(J)
C404	87-010-321-080	0E	CHIP CAPACITOR,82P(J)
C405	87-010-188-080	0E	CAP,CHIP 6800P
C406	87-010-188-080	0E	CAP,CHIP 6800P
C407	87-010-426-080	0E	C-CAP,S 0.012-25 B
C408	87-010-426-080	0E	C-CAP,S 0.012-25 B
C451	87-010-198-080	0E	CAP, CHIP 0.022
C452	87-010-382-080	0E	CAP, ELECT 22-25V
C453	87-010-183-080	0E	C-CAP,S 2700P-50 B
C454	87-010-183-080	0E	C-CAP,S 2700P-50 B
C455	87-010-183-080	0E	C-CAP,S 2700P-50 B
C456	87-010-197-080	0E	CAP, CHIP 0.01 DM
C458	87-010-178-080	0E	CHIP CAP 1000P
C459	87-010-175-080	0E	CAP 560P
C461	87-012-158-080	0E	C-CAP,S 390P-50 CH
C462	87-012-158-080	0E	C-CAP,S 390P-50 CH
C505	87-010-403-080	0E	CAP, ELECT 3.3-50V
C506	87-010-403-080	0E	CAP, ELECT 3.3-50V
C507	87-010-402-080	0E	CAP, ELECT 2.2-50V
C508	87-010-402-080	0E	CAP, ELECT 2.2-50V
C513	87-010-184-080	0E	CHIP CAPACITOR 3300P(K)
C514	87-010-184-080	0E	CHIP CAPACITOR 3300P(K)
C519	87-010-260-080	0E	CAP, ELECT 47-25V
C520	87-010-260-080	0E	CAP, ELECT 47-25V
C521	87-012-156-080	0E	C-CAP,S 220P-50 CH
C522	87-012-156-080	0E	C-CAP,S 220P-50 CH
C527	87-012-153-080	0E	C-CAP,S 120P-50 CH
C528	87-012-153-080	0E	C-CAP,S 120P-50 CH
C531	87-010-993-080	0E	C-CAP,S 0.056-25 B
C532	87-010-993-080	0E	C-CAP,S 0.056-25 B
C533	87-010-196-080	0E	CHIP CAPACITOR,0.1-25
C534	87-010-196-080	0E	CHIP CAPACITOR,0.1-25
C561	87-010-196-080	0E	CHIP CAPACITOR,0.1-25
C562	87-010-196-080	0E	CHIP CAPACITOR,0.1-25
C581	87-010-193-080	0E	CHIP CAPACITOR,0.033
C582	87-010-193-080	0E	CHIP CAPACITOR,0.033
C583	87-010-187-080	0E	CHIP CAPACITOR 5600P(K)
C584	87-010-187-080	0E	CHIP CAPACITOR 5600P(K)
C585	87-010-546-080	0E	CAP, ELECT 0.33-50V
C586	87-010-546-080	0E	CAP, ELECT 0.33-50V
C589	87-010-197-080	0E	CAP, CHIP 0.01 DM
C590	87-010-197-080	0E	CAP, CHIP 0.01 DM
C591	87-010-401-080	0E	CAP, ELECT 1-50V
C592	87-010-401-080	0E	CAP, ELECT 1-50V
C593	87-010-322-080	0E	C-CAP,S 100P-50 CH
C594	87-010-322-080	0E	C-CAP,S 100P-50 CH
C595	87-010-401-080	0E	CAP, ELECT 1-50V
C596	87-010-401-080	0E	CAP, ELECT 1-50V
C597	87-010-189-080	0E	C-CAP,S 8200P-50 B
C598	87-010-189-080	0E	C-CAP,S 8200P-50 B
C601	87-010-180-080	0E	C-CER 1500P
C602	87-010-180-080	0E	C-CER 1500P
C609	87-010-213-080	0E	C-CAP,S 0.015-50 B
C610	87-010-213-080	0E	C-CAP,S 0.015-50 B
C611	87-010-545-080	0E	CAP, ELECT 0.22-50V
C612	87-010-545-080	0E	CAP, ELECT 0.22-50V
C613	87-010-545-080	0E	CAP, ELECT 0.22-50V
C614	87-010-545-080	0E	CAP, ELECT 0.22-50V
C615	87-010-154-080	0E	CAP CHIP 10P
C616	87-010-408-080	0E	CAP, ELECT 47-50V
C617	87-010-408-080	0E	CAP, ELECT 47-50V

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C619	87-010-402-080	0E	CAP, ELECT 2.2-50V
C620	87-010-402-080	0E	CAP, ELECT 2.2-50V
C625	87-010-405-080	0E	CAP, ELECT 10-50V
C626	87-010-405-080	0E	CAP, ELECT 10-50V
C661	87-010-178-080		CHIP CAP 1000P<K,EZ>
C690	87-010-263-080	0E	CAP, ELECT 100-10V
C701	87-010-381-080	0E	CAP, ELECT 330-16V
C702	87-010-404-080	0E	CAP, ELECT 4.7-50V
C703	87-012-286-080	0E	CAP, U 0.01-25
C704	87-012-286-080	0E	CAP, U 0.01-25
C709	87-012-195-080	0E	C-CAP,U 100P-50CH
C711	87-010-263-080	0E	CAP, ELECT 100-10V
C712	87-010-831-080		C-CAP,U,0.1-16F<K,EZ>
C712	87-010-196-080	0E	C-CAP,0.1-25<HR,U,LH,D>
C713	87-012-286-080		CAP, U 0.01-25<K,EZ>
C714	87-012-286-080	0E	CAP, U 0.01-25
C715	87-012-195-080		C-CAP,U 100P-50CH<K,EZ>
C717	87-012-286-080	0E	CAP, U 0.01-25
C719	87-012-286-080	0E	CAP, U 0.01-25
C720	87-012-195-080	0E	C-CAP,U 100P-50CH
C721	87-012-176-080	0E	CAP 15P
C722	87-012-176-080	0E	CAP 15P
C723	87-012-274-080	0E	CHIP CAP,U 1000P-50B
C725	87-018-131-080		CAP, CER 1000P-50V<K,EZ>
C725	87-012-274-080	0E	CHIP CAP,U 1000P-50B<HR,U,LH,D>
C727	87-010-196-080	0E	CHIP CAPACITOR,0.1-25
C728	87-010-248-080	0E	CAP, ELECT 220-10V
C729	87-012-274-080	0E	CHIP CAP,U 1000P-50B
C731	87-012-286-080	0E	CAP, U 0.01-25
C752	87-012-282-080		CAP, U 4700P-50<K,EZ>
C753	87-012-195-080		C-CAP,U 100P-50CH<K,EZ>
C755	87-012-286-080		CAP, U 0.01-25<K,EZ>
C756	87-012-286-080	0E	CAP, U 0.01-25
C757	87-012-188-080	0E	C-CAP,U 47P-50 CH
C758	87-012-167-080	0E	C-CAP,U 5P-50 CH
C761	87-010-196-080		CHIP CAPACITOR,0.1-25<K,EZ>
C762	87-012-286-080		CAP, U 0.01-25<K,EZ>
C763	87-010-829-080	0E	CAP, U 0.047-16
C764	87-012-337-080	0E	C-CAP,U 56P-50 CH<HR,U,LH,D>
C765	87-012-286-080	0E	CAP, U 0.01-25
C766	87-010-197-080		CAP, CHIP 0.01 DM<K,EZ>
C768	87-012-286-080	0E	CAP, U 0.01-25
C769	87-010-260-080	0E	CAP, ELECT 47-25V
C770	87-010-829-080	0E	CAP, U 0.047-16
C771	87-010-383-080	0E	CAP, ELECT 33-25V
C772	87-010-829-080	0E	CAP, U 0.047-16
C773	87-010-196-080	0E	CHIP CAPACITOR,0.1-25
C774	87-010-263-080	0E	CAP, ELECT 100-10V
C775	87-015-688-080	0E	CAP,E 4.7-35 7L
C776	87-012-286-080	0E	CAP, U 0.01-25
C777	87-015-694-080	0E	CAP,E 0.47-50 7L
C778	87-015-695-080	0E	CAP,E 1-50 7L
C779	87-015-695-080	0E	CAP,E 1-50 7L
C780	87-010-196-080	0E	CHIP CAPACITOR,0.1-25
C781	87-010-405-080	0E	CAP, ELECT 10-50V
C782	87-010-405-080	0E	CAP, ELECT 10-50V
C783	87-012-286-080	0E	CAP, U 0.01-25
C784	87-012-286-080	0E	CAP, U 0.01-25
C785	87-010-401-080	0E	CAP, ELECT 1-50V<HR,U,LH,D>
C785	87-010-405-080		CAP, ELECT 10-50V<K,EZ>
C786	87-010-401-080	0E	CAP, ELECT 1-50V<HR,U,LH,D>
C786	87-010-405-080		CAP, ELECT 10-50V<K,EZ>
C787	87-010-213-080		C-CAP,S 0.015-50 B<K,EZ>
C788	87-010-213-080		C-CAP,S 0.015-50 B<K,EZ>
C789	87-012-275-080	0E	C-CAP,U 1200P-50 B
C790	87-012-275-080	0E	C-CAP,U 1200P-50 B
C791	87-010-405-080	0E	CAP, ELECT 10-50V
C793	87-A10-915-080		C-CAP,U 1000P-25 J CH<K,EZ>
C793	87-012-273-080	0E	C-CAP,U 820P-50 B<HR,U,LH,D>
C794	87-010-406-080	0E	CAP, ELECT 22-50

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C795	87-010-596-080	0E	CAP, S 0.047-16
C796	87-010-403-080	0E	CAP, ELECT 3.3-50V
C797	87-012-278-080		C-CAP,U 2200P-50 B<U,LH>
C797	87-012-276-080	0E	C-CAP,S 1500 PBK<EXCEPT U,LH>
C798	87-012-278-080		C-CAP,U 2200P-50 B<U,LH>
C798	87-012-276-080	0E	C-CAP,S 1500 PBK<EXCEPT U,LH>
C799	87-010-829-080	0E	CAP, U 0.047-16
C803	87-A10-207-080		CAP,TCS 0.01-50KBUP050<K,EZ>
C812	87-012-286-080	0E	CAP, U 0.01-25
C814	87-012-286-080		CAP, U 0.01-25<K,EZ>
C820	87-010-260-080	0E	CAP, ELECT 47-25V
C821	87-012-286-080	0E	CAP, U 0.01-25
C822	87-012-286-080	0E	CAP, U 0.01-25
C823	87-012-286-080	0E	CAP, U 0.01-25
C828	87-010-196-080	0E	CHIP CAPACITOR,0.1-25
C829	87-010-196-080	0E	CHIP CAPACITOR,0.1-25
C859	87-012-286-080		CAP, U 0.01-25<EZ>
C861	87-012-199-080		CAP 220P<EZ>
C862	87-012-199-080		CAP 220P<EZ>
C863	87-012-270-080		CAP, U 470P-50<EZ>
C864	87-010-405-080		CAP, ELECT 10-50V<EZ>
C865	87-010-196-080		CHIP CAPACITOR,0.1-25<EZ>
C866	87-010-405-080		CAP, ELECT 10-50V<EZ>
C867	87-012-286-080		CAP, U 0.01-25<EZ>
C868	87-012-184-080		C-CAP,U 33P-50 CH<EZ>
C869	87-012-180-080		C-CAP,U 22P-50 CH<EZ>
C872	87-010-400-080	0E	CAP, ELECT 0.47-50V<D>
C873	87-010-404-080	0E	CAP, ELECT 4.7-50V<D>
C877	87-012-278-080	0E	C-CAP,U 2200P-50 B<D>
C878	87-012-278-080	0E	C-CAP,U 2200P-50 B<D>
C881	87-012-141-080	0E	CHIP-CAPACITOR,0.22-16F<D>
C882	87-012-172-080	0E	CAPACITOR CHIP U 10P CH<D>
C883	87-010-404-080	0E	CAP, ELECT 4.7-50V<D>
C884	87-010-260-080	0E	CAP, ELECT 47-25V<D>
C885	87-010-545-080	0E	CAP, ELECT 0.22-50V<D>
C886	87-010-545-080	0E	CAP, ELECT 0.22-50V<D>
C887	87-012-286-080	0E	CAP, U 0.01-25<D>
C888	87-010-787-080	0E	CAP, U 0.022-25<D>
C889	87-010-248-080	0E	CAP, ELECT 220-10V<D>
C909	87-012-286-080		CAP, U 0.01-25<K,EZ>
C910	87-012-286-080		CAP, U 0.01-25<K,EZ>
C940	87-012-286-080		CAP, U 0.01-25<K,EZ>
C942	87-012-172-080		CAPACITOR CHIP U 10P CH<K,EZ>
C947	87-012-286-080		CAP, U 0.01-25<K,EZ>
C949	87-A10-039-080		C-CAP,U 470P-50 J CH<K,EZ>
C952	87-012-286-080		CAP, U 0.01-25<K,EZ>
C958	87-010-197-080		CAP, CHIP 0.01 DM<K,EZ>
C959	87-010-831-080	0E	C-CAP,U,0.1-16F
C960	87-010-196-080	0E	CHIP CAPACITOR,0.1-25
C961	87-012-170-080	0E	C-CAP,U 8P-50 CH<HR,U,LH,D>
C962	87-010-401-080		CAP, ELECT 1-50V<K,EZ>
C963	87-010-196-080	0E	C-CAP,0.1-25<HR,U,LH,D>
CF801	87-008-423-010		CERAMIC FILTER, SFE10.7<K,EZ>
CF801	87-008-261-010	1A	FILTER, SFE10.7MA5-A<HR,U,LH,D>
CF802	82-785-747-010		CF MS2 GHY R<K,EZ>
CF802	87-008-261-010	1A	FILTER, SFE10.7MA5-A<HR,U,LH,D>
CN201	87-A60-619-010	0E	CONN,2P V 2MM JMT
CN202	87-099-719-010	1B	CONN,30P TYK-B(X)
CN351	87-A60-624-010	0E	CONN,7P V 2MM JMT
CN671	87-099-210-010	0E	CONN,5P 6216 H
FFE801	A8-6ZA-19C-170		6ZA-1 YFEENC<K,EZ>
FFE801	A8-6ZA-19D-070	1H	6ZA-1 YFEJNC<D>
FFE801	A8-8ZA-193-070		8ZA-1 YFEUNC<HR,U,LH>
J241	87-A60-217-010	1A	TERMINAL,SPKR 4P
J501	87-A60-926-010	1A	JACK,PIN 4P R/W TC58-118
J590	87-A60-420-010	1A	JACK,3.5 ST (MSC)
J601	87-A60-926-010	1A	JACK,PIN 4P R/W TC58-118
J801	87-A60-202-010		TERMINAL,ANT 4P MSP-154V-02<HR>
J801	87-A60-880-010		TERMINAL,ANTPAL2PMSP313V0<K,EZ>
JW632	87-A90-896-080		F-BEAD, 035600STY7<K,EZ>

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
L201	87-005-366-010	1A	COIL, 1UH
L202	87-005-366-010	1A	COIL, 1UH
L451	87-007-342-010	0E	COIL,OSC 85K BIAS
L551	87-005-366-010	1A	COIL, 1UH
L552	87-005-366-010	1A	COIL, 1UH
L591	87-005-366-010	1A	COIL, 1UH
L592	87-005-366-010	1A	COIL, 1UH
L771	87-A50-266-010	1A	COIL,FM DET-2N(TOK)
L772	88-CL4-692-010	--	FLTR,APCFMP-450 (TOK)<D>
L772	88-CL4-693-010		FLTR,PCFAYH-450 (TOK)<EXCEPT D>
L781	87-005-847-080		COIL,2.2UH(CECS)<K,EZ>
L832	87-005-847-080		COIL,2.2UH(CECS)<K,EZ>
L851	87-005-847-080		COIL,2.2UH(CECS)<EZ>
L941	87-A50-020-010		COIL,ANT LW(COI)<K,EZ>
L942	87-A50-019-010		COIL,OSC LW(COI)<K,EZ>
L981	87-NF4-650-010		COIL,AM PACK 4N(TOK)<HR>
L981	87-NF4-651-110		COIL,AM PACK2N(TOM)<K,EZ>
PR201	87-A90-070-080		PROTECTOR,3.5A 251<U>
PR201	87-A90-473-080	0E	PROTECTOR,3.5A 49160V<EXCEPT U>
PR202	87-A90-070-080		PROTECTOR,3.5A 251<U>
PR202	87-A90-473-080	0E	PROTECTOR,3.5A 49160V<EXCEPT U>
PR601	87-A91-153-080		FUSE,630MA 125V 251<U>
PR601	87-026-689-080	0E	PROTECTOR,1A 60V 491<EXCEPT U>
R223	87-A00-258-080	0E	RES,M/F 0.22-1W J
R224	87-A00-258-080	0E	RES,M/F 0.22-1W J
R249	87-A00-258-080	0E	RES,M/F 0.22-1W J
R250	87-A00-258-080	0E	RES,M/F 0.22-1W J
R535	87-A00-258-080	0E	RES,M/F 0.22-1W J
R536	87-A00-258-080	0E	RES,M/F 0.22-1W J
R537	87-A00-258-080	0E	RES,M/F 0.22-1W J
R538	87-A00-258-080	0E	RES,M/F 0.22-1W J
TC942	87-011-164-010		CAPACITOR,TRIMMER 30P<K,EZ>
TH201	87-A91-042-080	0E	C-THMS,100K 55001
TH202	87-A91-042-080	0E	C-THMS,100K 55001
W101	8Z-CL6-642-010	--	CONN ASSY,11P ZCL6
W101	8Z-CL6-642-010	--	CONN ASSY,11P ZCL6
WH101	87-A91-179-010	0E	HLDR,WIRE 2.5-11P
WH101	87-A91-179-010	0E	HLDR,WIRE 2.5-11P
X721	87-A70-061-010	1A	VIB,XTAL 4.500MHZ CSA-309
X851	87-A70-091-010		VIB,XTAL 4.332MHZ CSA-309<EZ>
X891	87-030-394-010	1B	VIB,CER CSA3.6MGF228<D>

FRONT C.B

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C301	87-010-178-080	0E	CHIP CAP 1000P
C302	87-010-197-080	0E	CAP, CHIP 0.01 DM
C304	87-010-405-040	0E	CAP,E 10-50
C305	87-A10-078-040	--	CAP,E 47-35 REA
C307	87-010-404-040	0E	CAP,E 4.7-50 SME
C308	87-010-404-040	0E	CAP,E 4.7-50 SME
C309	87-010-198-080	0E	CAP, CHIP 0.022
C313	87-010-263-040	0E	CAP,E 100-10
C314	87-010-248-040	0E	CAP,E 220-10 SME
C315	87-010-198-080	0E	CAP, CHIP 0.022
C316	87-010-197-080	0E	CAP, CHIP 0.01 DM
C317	87-010-198-080	0E	CAP, CHIP 0.022
C318	87-010-320-080	0E	CHIP CAP 68P
C319	87-010-320-080	0E	CHIP CAP 68P
C320	87-010-320-080	0E	CHIP CAP 68P
C321	87-010-320-080	0E	CHIP CAP 68P
C322	87-010-320-080	0E	CHIP CAP 68P
C323	87-010-320-080	0E	CHIP CAP 68P
C324	87-010-320-080	0E	CHIP CAP 68P
C325	87-010-320-080	0E	CHIP CAP 68P
C326	87-010-176-080	0E	C-CAP,S 680P-50 SL
C327	87-010-320-080	0E	CHIP CAP 68P
C328	87-010-320-080	0E	CHIP CAP 68P
C329	87-010-198-080	0E	CAP, CHIP 0.022
C330	87-010-318-080	0E	C-CAP,S 47P-50 CH

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C331	87-010-312-080	0E	C-CAP,S 15P-50 CH
C333	87-010-401-040	0E	CAP,E 1-50 SME
C335	87-010-316-080	0E	C-CAP,S 33P-50 CH
C338	87-010-197-080	0E	CAP, CHIP 0.01 DM
C339	87-015-819-080	0E	CAPACITOR,0.01
C395	87-010-320-080	0E	CHIP CAP 68P
C396	87-010-320-080	0E	CHIP CAP 68P
C397	87-010-320-080	0E	CHIP CAP 68P
C398	87-010-320-080	0E	CHIP CAP 68P
C399	87-010-320-080	0E	CHIP CAP 68P
C400	87-010-320-080	0E	CHIP CAP 68P
C401	87-010-320-080	0E	CHIP CAP 68P
C402	87-010-320-080	0E	CHIP CAP 68P
CN301	87-099-720-010	1B	CONN,30P TYK-B(P)
CN302	87-CL4-704-010	1B	CONN ASSY 9P DECK
CN303	87-099-203-010	0E	CONN,10P 6216 H
FC303	88-910-271-210	--	FF-CABLE, 10P 1.25 270MM
FL301	8Z-CL6-682-010	2M	FL,11BT-171GK
LED301	87-A40-229-040	0E	LED,SLR-342VR TB7 RED
LED302	87-A40-619-040	0E	LED,SLR-56PT-T31-W GRN
LED303	87-A40-619-040	0E	LED,SLR-56PT-T31-W GRN
LED304	87-A40-619-040	0E	LED,SLR-56PT-T31-W GRN
LED305	87-A40-619-040	0E	LED,SLR-56PT-T31-W GRN
LED306	87-A40-619-040	0E	LED,SLR-56PT-T31-W GRN
S301	87-A90-095-080	0E	SW,TACT EVQ11G04M
S302	87-A90-095-080	0E	SW,TACT EVQ11G04M
S303	87-A90-095-080	0E	SW,TACT EVQ11G04M
S304	87-A90-095-080	0E	SW,TACT EVQ11G04M
S305	87-A90-095-080	0E	SW,TACT EVQ11G04M
S306	87-A90-095-080	0E	SW,TACT EVQ11G04M
S308	87-A90-095-080	0E	SW,TACT EVQ11G04M
S310	87-A90-095-080	0E	SW,TACT EVQ11G04M
S311	87-A90-095-080	0E	SW,TACT EVQ11G04M
S312	87-A90-095-080	0E	SW,TACT EVQ11G04M
S313	87-A90-095-080	0E	SW,TACT EVQ11G04M
S314	87-A90-095-080	0E	SW,TACT EVQ11G04M
S315	87-A90-095-080	0E	SW,TACT EVQ11G04M
S317	87-A90-095-080	0E	SW,TACT EVQ11G04M
S318	87-A90-095-080	0E	SW,TACT EVQ11G04M
S319	87-A90-095-080	0E	SW,TACT EVQ11G04M
S351	87-A90-386-010	1B	SW,RTRY EC16B24204 E
S352	87-A91-383-010	--	SW,RTRY EC16B24104-W
X301	87-030-375-080	1A	VIB,CF 4.19MG200

CD C.B

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C1	87-010-406-080	0E	CAP, ELECT 22-50
C2	87-010-197-080	0E	CAP, CHIP 0.01 DM
C3	87-010-401-080	0E	CAP, ELECT 1-50V
C4	87-010-371-080	0E	CAP, ELECT 470-6.3V
C5	87-010-197-080	0E	CAP, CHIP 0.01 DM
C6	87-010-374-080	0E	CAP, ELECT 47-10V
C7	87-010-178-080	0E	CHIP CAP 1000P
C8	87-010-198-080	0E	CAP, CHIP 0.022
C9	87-010-263-080	0E	CAP, ELECT 100-10V
C10	87-010-263-080	0E	CAP, ELECT 100-10V
C12	87-010-401-080	0E	CAP, ELECT 1-50V
C13	87-010-197-080	0E	CAP, CHIP 0.01 DM
C14	87-010-405-080	0E	CAP, ELECT 10-50V
C16	87-010-544-080	0E	CAP, ELECT 0.1-50V
C17	87-010-178-080	0E	CHIP CAP 1000P
C18	87-010-213-080	0E	C-CAP,S 0.015-50 B
C20	87-016-369-080	0E	C-CAP,S 0.033-25 B K
C21	87-A11-010-080	0E	CAP,M 0.082-50 J DE
C22	87-010-180-080	0E	C-CER 1500P
C23	87-010-993-080	0E	C-CAP,S 0.056-25 B
C24	87-012-155-080	0E	C-CAP 180P-50CH
C26	87-A11-014-080	0E	CAP,M 0.22-50 J DE
C29	87-010-178-080	0E	CHIP CAP 1000P
C30	87-010-178-080	0E	CHIP CAP 1000P
C31	87-010-402-080	0E	CAP, ELECT 2.2-50V
C32	87-010-380-080	0E	CAP, ELECT 47-16V
C33	87-010-401-080	0E	CAP, ELECT 1-50V
C34	87-010-186-080	0E	CAP,CHIP 4700P
C35	87-010-197-080	0E	CAP, CHIP 0.01 DM
C36	87-010-374-080	0E	CAP, ELECT 47-10V
C37	87-010-404-080	0E	CAP, ELECT 4.7-50V
C38	87-010-196-080	0E	CHIP CAPACITOR,0.1-25
C39	87-010-178-080	0E	CHIP CAP 1000P
C40	87-010-147-080	0E	C-CAP,S 3P-50 CH
C41	87-A11-006-080	0E	CAP,M 0.033-50 J DE
C42	87-010-313-080	0E	CAP, CHIP 18P
C44	87-010-176-080	0E	C-CAP,S 680P-50 SL
C45	87-010-196-080	0E	CHIP CAPACITOR,0.1-25
C46	87-010-196-080	0E	CHIP CAPACITOR,0.1-25
C47	87-010-196-080	0E	CHIP CAPACITOR,0.1-25
C48	87-010-315-080	0E	C-CAP,S 27P-50 CH
C50	87-012-140-080	0E	CAP 470P
C57	87-010-316-080	0E	C-CAP,S 33P-50 CH
C58	87-010-316-080	0E	C-CAP,S 33P-50 CH
C59	87-010-263-080	0E	CAP, ELECT 100-10V
C60	87-010-196-080	0E	CHIP CAPACITOR,0.1-25
C61	87-010-196-080	0E	CHIP CAPACITOR,0.1-25
C62	87-010-370-080	0E	CAP,E 330-6.3 SME
C65	87-010-404-080	0E	CAP, ELECT 4.7-50V
C66	87-010-196-080	0E	CHIP CAPACITOR,0.1-25
C67	87-010-263-080	0E	CAP, ELECT 100-10V
C68	87-010-322-080	0E	C-CAP,S 100P-50 CH
C75	87-010-197-080	0E	CAP, CHIP 0.01 DM
C76	87-A10-102-080	0E	CAP,E 1000-10 REA
C77	87-010-263-080	0E	CAP, ELECT 100-10V
C78	87-010-197-080	0E	CAP, CHIP 0.01 DM
C79	87-010-197-080	0E	CAP, CHIP 0.01 DM
C80	87-010-112-080	0E	CAP, ELECT 100-16V
C81	87-010-405-080	0E	CAP, ELECT 10-50V
C82	87-010-405-080	0E	CAP, ELECT 10-50V
C83	87-012-157-080	0E	C-CAP,S 330P-50 CH
C84	87-012-157-080	0E	C-CAP,S 330P-50 CH
C85	87-010-263-080	0E	CAP, ELECT 100-10V
C90	87-010-197-080	0E	CAP, CHIP 0.01 DM
C91	87-010-404-080	0E	CAP, ELECT 4.7-50V
C92	87-010-235-080	0E	CAP,E 470-16 SME
C93	87-010-196-080	0E	CHIP CAPACITOR,0.1-25
C95	87-010-197-080	0E	CAP, CHIP 0.01 DM
C96	87-010-221-080	0E	CAP, ELECT 470-10V
C97	87-010-197-080	0E	CAP, CHIP 0.01 DM
C98	87-012-154-080	0E	C-CAP,S 150P-50 CH
C99	87-010-374-080	0E	CAP, ELECT 47-10V
C100	87-010-318-080	0E	C-CAP,S 47P-50 CH
C103	87-010-322-080	0E	C-CAP,S 100P-50 CH
C104	87-010-322-080	0E	C-CAP,S 100P-50 CH
C105	87-010-322-080	0E	C-CAP,S 100P-50 CH
C106	87-010-322-080	0E	C-CAP,S 100P-50 CH
C121	87-010-322-080	0E	C-CAP,S 100P-50 CH
C122	87-010-322-080	0E	C-CAP,S 100P-50 CH
C123	87-010-322-080	0E	C-CAP,S 100P-50 CH
C124	87-010-322-080	0E	C-CAP,S 100P-50 CH
C125	87-010-322-080	0E	C-CAP,S 100P-50 CH
C126	87-010-322-080	0E	C-CAP,S 100P-50 CH
C127	87-010-322-080	0E	C-CAP,S 100P-50 CH
C128	87-010-196-080	0E	CHIP CAPACITOR,0.1-25
C129	87-010-805-080	0E	CAP, S 1-16
C131	87-010-805-080	0E	CAP, S 1-16
C132	87-010-805-080	0E	CAP, S 1-16
C151	87-010-805-080	0E	CAP, S 1-16
C155	87-010-197-080	0E	CAP, CHIP 0.01 DM
C156	87-010-263-080	0E	CAP, ELECT 100-10V
CN1	87-A60-130-010	0E	CONN,5P V FE
CN2	87-099-203-010	0E	CONN,10P 6216 H
CN3	87-A60-131-010	0E	CONN,6P V FE

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
CN4	87-A60-248-010	0E	CONN,16P H CFF1416
CN6	87-A60-130-010	0E	CONN,5P V FE
FB102	87-A90-896-080	0E	F-BEAD, 035600STY7
FC1	88-905-301-110	0E	FF-CABLE, 5P 300MM
FC3	88-906-171-110	0E	FF-CABLE,6P 1.25
FC4	8Z-CL7-704-010	0E	FF-CABLE, 16P 1.0
J155	84-ZG1-244-310	1A	CABI,OPTICAL
LED150	87-A40-558-010	0E	LED,SLZ-8128A-01-A
⚠ R70	87-029-124-090	0E	RESISTOR, FUSE 1/4W 2.2
⚠ R73	87-029-361-090	0E	FUSING RESISTOR, 1/2W-3.3
X1	87-A70-046-010	1B	VIB,XTAL 16.934MHZ

PT C.B

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C101	87-010-387-080	1A	CAP,E 470-25 SME
C107	87-010-260-080	0E	CAP, ELECT 47-25V
C108	87-010-260-080	0E	CAP, ELECT 47-25V
C109	87-010-260-080	0E	CAP, ELECT 47-25V
C110	87-010-260-080	0E	CAP, ELECT 47-25V
C111	87-010-247-080	0E	CAP, ELECT 100-50V
C112	87-010-263-080	0E	CAP, ELECT 100-10V
CN101	87-099-411-010	--	CONN,11P V WHT EH
⚠ F101	87-035-222-010		FUSE, 1AT<K,EZ>
⚠ F101	87-035-190-010		FUSE, 2AT<HR,LH>
⚠ F101	87-035-414-010	1A	FUSE, T2A 250V UL<D>
⚠ F101	87-035-488-010		FUSE,3.15A 125V D UL<U>
⚠ FC101	87-033-213-080	0E	CLAMP, FUSE
⚠ FC102	87-033-213-080	0E	CLAMP, FUSE
⚠ PR101	87-026-690-080		FUSE,5A 125V 251<U>
⚠ PR101	87-026-681-080	0E	PROTECTOR,5A 60V 491<EXCEPT U>
⚠ PR102	87-026-690-080		FUSE,5A 125V 251<U>
⚠ PR102	87-026-681-080	0E	PROTECTOR,5A 60V 491<EXCEPT U>
⚠ PR103	87-A90-070-080		PROTECTOR,3.5A 251<U>
⚠ PR103	87-A90-473-080	0E	PROTECTOR,3.5A 49160V<EXCEPT U>
⚠ PR104	87-A90-070-080		PROTECTOR,3.5A 251<U>
⚠ PR104	87-A90-473-080	0E	PROTECTOR,3.5A 49160V<EXCEPT U>
⚠ PT101	8Z-CL6-605-010	2B	PT,D EI66-60 ZCL6<D>
⚠ PT101	8Z-CL6-604-010		PT,EZ EI66-60 ZCL6<K,EZ>
⚠ PT101	8Z-CL6-602-010		PT,HR EI66-60 ZCL6<HR,LH>
⚠ PT101	8Z-CL6-601-010		PT,U EI66-60 ZCL6<U>
⚠ PT102	8Z-NF8-660-110	1C	PT,SUB ZNF-8(D)<D>
⚠ PT102	8Z-NF8-662-010		PT,SUB ZNF-8(E)<K,EZ>
⚠ PT102	8Z-NF8-663-010		PT,SUB ZNF-8(H)<HR,LH>
⚠ PT102	8Z-NF8-661-010		PT,SUB ZNF-8(U)<U>

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
⚠ RY102	87-A91-281-010		RELAY,ACDC12VOSASS212DM5<HR,LH>
⚠ RY102	87-A90-976-010	1B	RELAY,AC12VSDTS112LMR<K,EZ,U,D>
⚠ SW101	87-A90-234-010		SW,SL 1-2-2 SWS2201<HR,LH>
⚠ T101	87-A60-317-010	0E	TERMINAL, 1P MSC
⚠ T102	87-A60-317-010	0E	TERMINAL, 1P MSC

RELAY C.B

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
CN301	88-CL4-701-010	1B	CONN ASSY,7P RPEH

CD LOAD C.B

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
CON6	87-099-210-010		CONN,5P 6216H
FC6	88-905-231-110		FF-CABLE,5P 1.25 23
M1	87-045-305-010		MOTOR,RF-500TB DC-5V(2MA)
SW1	87-036-110-010		PUSH SWITCH
SW2	87-036-110-010		PUSH SWITCH

DECK C.B

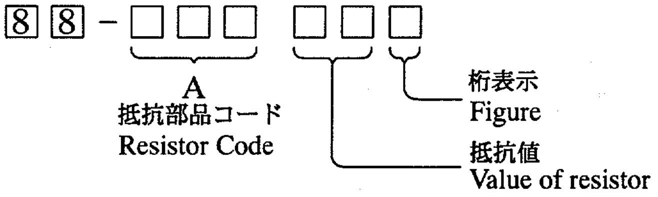
REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
CON1	87-009-352-010		CONN,9P PH H
SFR1	87-024-581-010		SFR,3.3K H KVSF637A
SOL2	8Z-ZM1-618-410		SOL ASSY,27
SW2	87-036-110-010		SW,MICRO SPPB62
SW3	87-036-110-010		SW,MICRO SPPB62
SW5	87-036-110-010		SW,MICRO SPPB62
SW6	87-A90-248-010		SW,MICRO ESE11SH2CXQ
W1	82-ZM1-625-010		RBN-CORD,4P-5S

CD DRIVE C.B

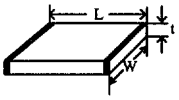
REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
CON3	87-A60-086-010		CONN,6P H 6216
FC3	88-906-261-110		FF-CABLE,6P 1.25 26
M20	87-045-358-010		MOT,RF-310TA 43
M21	87-045-356-010		MOT,RF-310TA 30
SW1	87-A90-042-010		SW,LEAF MSW-17310MVP0

○チップ抵抗部品コード／CHIP RESISTOR PART CODE

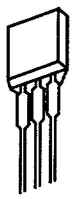
チップ抵抗部品コードの成り立ち
Chip Resistor Part Coding


8 8 - □□□ □□□
A
抵抗部品コード
Resistor Code
桁表示
Figure
抵抗値
Value of resistor

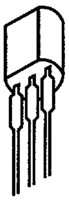
チップ抵抗
Chip resistor

容量 Wattage	種類 Type	許容誤差 Tolerance	記号 Symbol	寸法／Dimensions (mm)				抵抗コード　: A Resistor Code : A
				外形／Form	L	W	t	
1/16W	1005	±5%	CJ		1.0	0.5	0.35	104
1/16W	1608	±5%	CJ		1.6	0.8	0.45	108
1/10W	2125	±5%	CJ		2	1.25	0.45	118
1/8W	3216	±5%	CJ		3.2	1.6	0.55	128

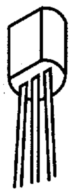
TRANSISTOR ILLUSTRATION



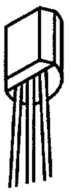
2SA933
2SC4115
DTA144ES
DTC114ES
DTC144ES
KTA1267



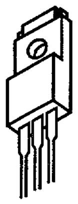
2SA1296
2SC1815
KTA1266
KTC3198



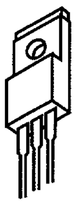
2SA952



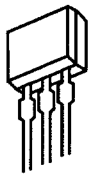
2SA1318
2SC3331



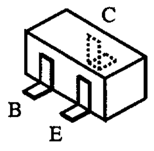
2SB1616
2SD2478



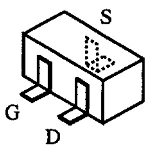
2SB1344
2SB1370
2SD2025



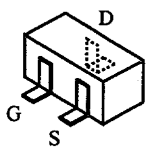
2SK2541



2SA1162
2SA1235
2SA1514
2SC2712
2SC2714
2SC3052
2SD1383
2SD1306
DTA143EK
DTA144EK
DTA144TK
DTC114EK
DTC114TK
DTC143TK
DTC144EK
RT1P141C
RT1P144C

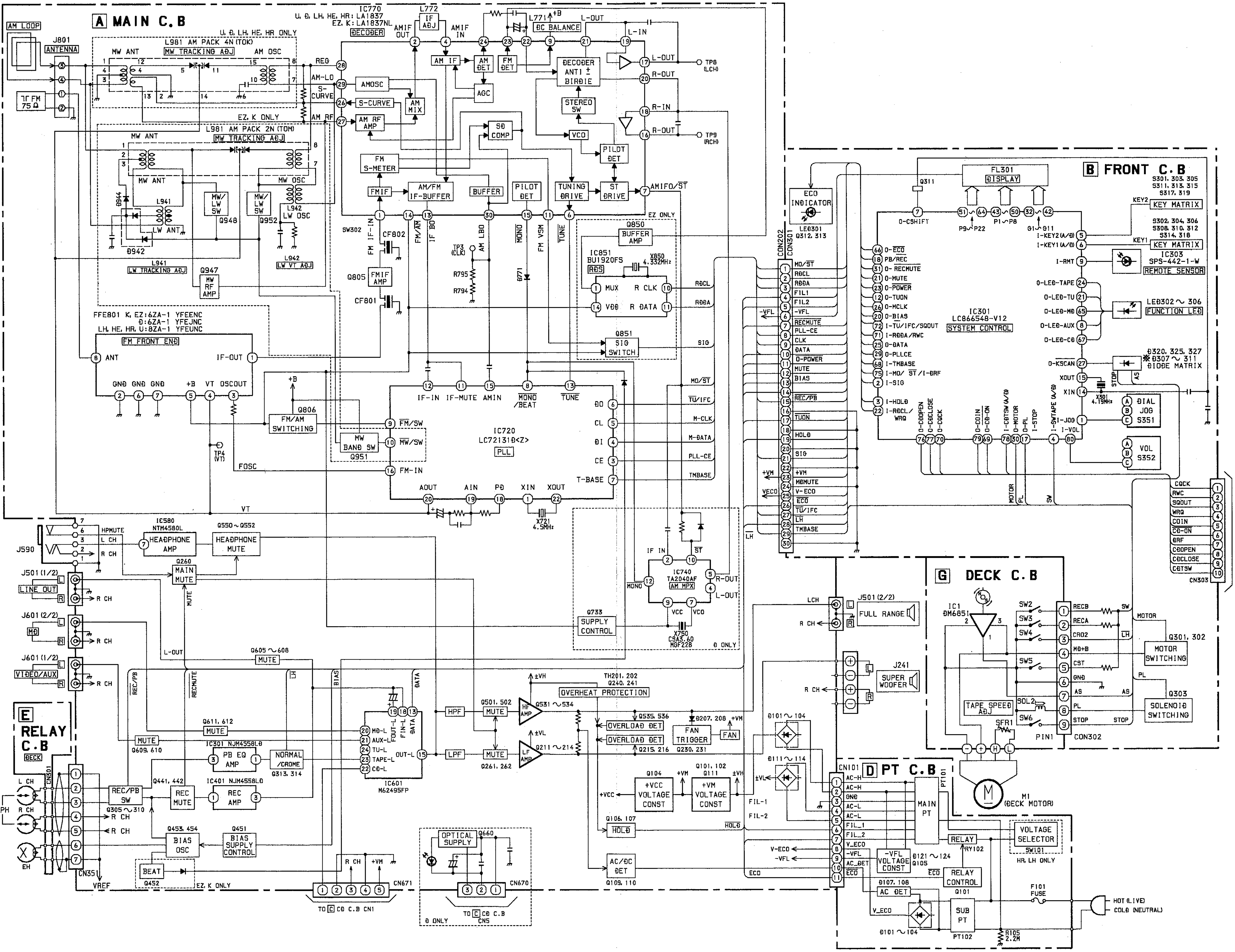


2SK543



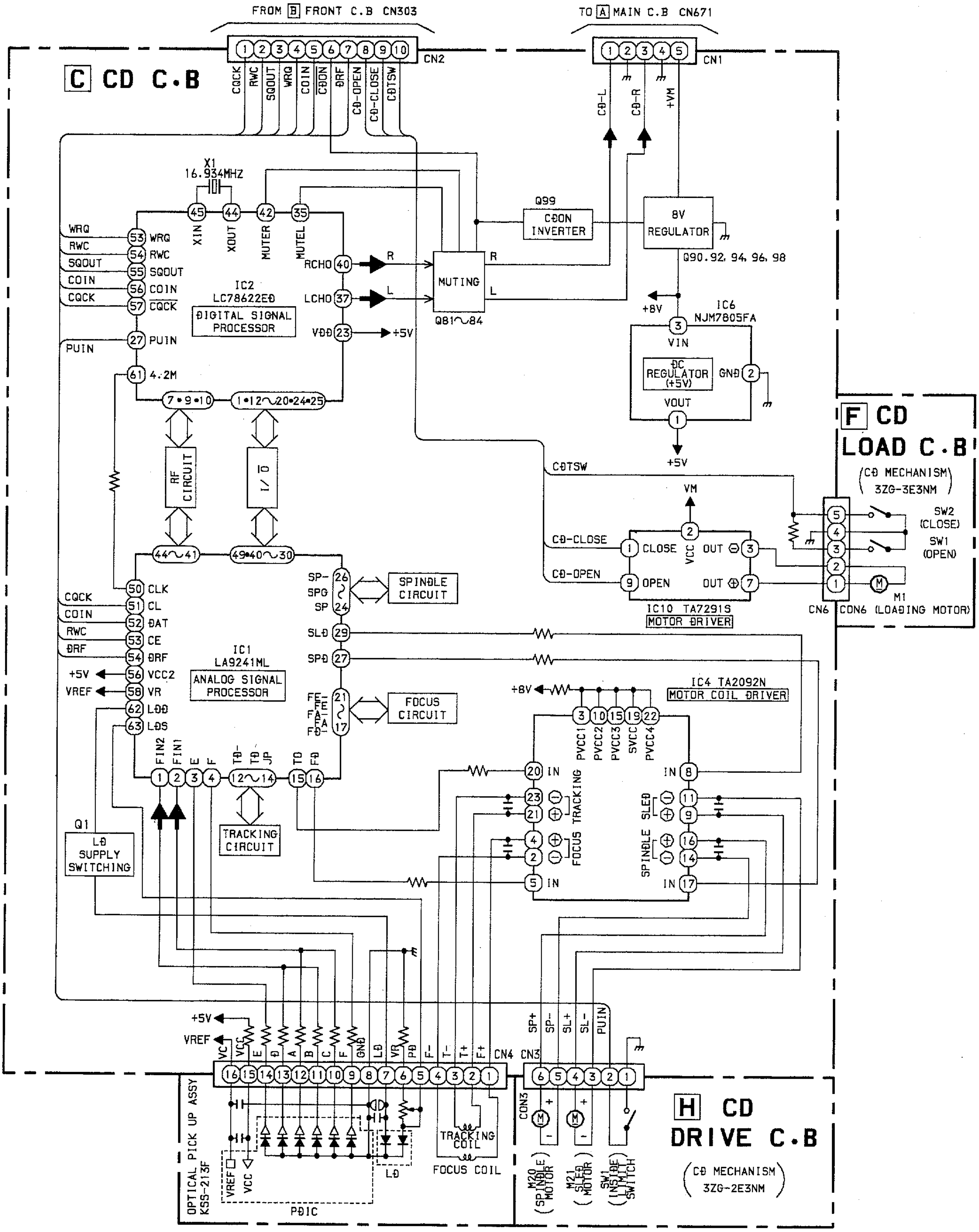
2SK2158

BLOCK DIAGRAM – 1 (MAIN / FRONT / PT / DECK / RELAY)



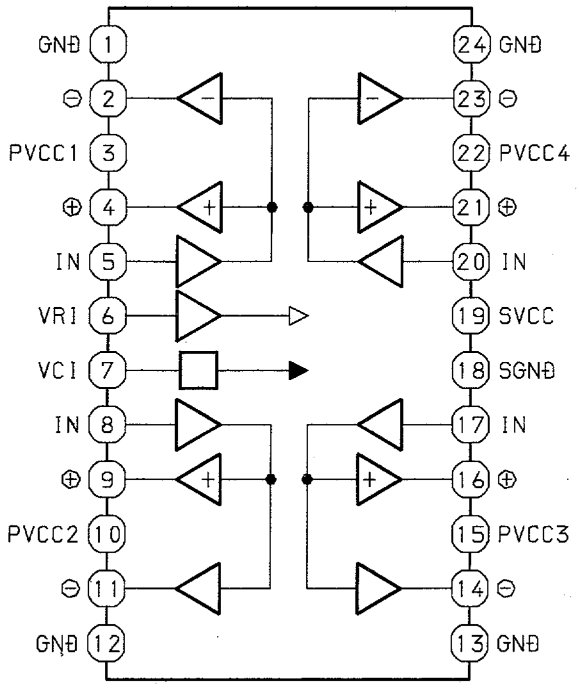
A MAIN C.B
AM LOOP
J801 ANTENNA
FM 75Ω
L981 AM PACK 4N (TOK)
MW TRACKING ADJ
U, D, LH, HE, HR ONLY
EZ, K ONLY
L981 AM PACK 2N (TOM)
MW ANT
MW OSC
LW ANT
LW OSC
MW/LW SW
Q948
Q952
D942
D944
L941 LW TRACKING ADJ
L942 LW VT ADJ
Q947 MW RF AMP
FFE801 K, EZ: 6ZA-1 YFEENC
D: 6ZA-1 YFEJNC
LH, HE, HR, U: 8ZA-1 YFEUNC
FM FRONT END
ANT
IF-OUT
GND GND GND +B VT OSCOUT
IC770
U, D, LH, HE, HR: LA1837
EZ, K: LA1837NL
DECODER
L772 IF ADJ
AMIF OUT
AMIF IN
REG
AM-LO
S-CURVE
AM RF
AMOSC
S-CURVE
AM MIX
AM RF AMP
AM IF
AM DET
FM DET
AGC
L771 DC BALANCE
DECODER ANTI BIRDIE
STEREO SW
VCO
SD COMP
PILOT DET
FM S-METER
FMIF
AM/FM IF-BUFFER
BUFFER
PILOT DET
TUNING DRIVE
ST DRIVE
AMIFO/ST
L-OUT
L-IN
R-OUT
R-IN
TP8 (LCH)
TP9 (RCH)
SW302
FM IF-IN
CF802
Q805 FMIF AMP
CF801
FM/AM
IF BD
TP3 (CLK)
AM LBO
R795
R794
MONO
FM VSM
TUNE
D771
EZ ONLY
Q850 BUFFER AMP
IC851 BU1920FS
RDS
X850 4.332MHz
MUX
R CLK
VDD
R DATA
Q851 SIG SWITCH
Q806 FM/AM SWITCHING
TP4 (VT)
FOSC
MW BAND SW
Q951
IC720 LC72131D<Z>
PLL
IF-IN IF-MUTE AMIN MONO/BEAT TUNE
FM/SW
MW/SW
FM-IN
DO CL DI CE T-BASE
AOUT AIN PD XIN XOUT
X721 4.5MHz
VT
IC740 TA2040AF
AM MPX
IF IN
ST
R-OUT
L-OUT
VCC
X750 CSA3.60 MGF228
Q733 SUPPLY CONTROL
D ONLY
CON202
CON301
RDCL
RDDA
SIG
MO/ST
TU/IFC
M-CLK
M-DATA
PLL-CE
TMBASE
J590
HPMUTE
L CH
R CH
IC580 NJM4580L
HEADPHONE AMP
Q550～Q552 HEADPHONE MUTE
Q260 MAIN MUTE
J501 (1/2) LINE OUT
J601 (2/2) MD
J601 (1/2) VIDEO/AUX
L-OUT
Q605～608 MUTE
REC/PB
RECMUTE
BIAS
DATA
Q611, 612 MUTE
Q609, 610 MUTE
IC301 NJM4558LD
PB EQ AMP
NORMAL/CROME
Q313, 314
IC401 NJM4558LD
REC AMP
REC MUTE
Q441, 442
REC/PB SW
Q305～310
Q453, 454 BIAS OSC
Q451 BIAS SUPPLY CONTROL
BEAT
Q452
EZ, K ONLY
VREF
IC601 M62495FP
MD-L AUX-L TU-L TAPE-L CD-L
OUT-L
FOUT-L
FIN-L
HPF
LPF
Q501, 502 MUTE
Q261, 262 MUTE
HF AMP
Q531～534
LF AMP
Q211～214
TH201, 202
Q240, 241
OVERHEAT PROTECTION
Q535, 536 OVERLOAD DET
OVERLOAD DET
Q215, 216
Q207, 208
FAN TRIGGER
Q230, 231
FAN
Q104 +VCC VOLTAGE CONST
Q101, 102 Q111 +VM VOLTAGE CONST
Q106, 107 HOLD
AC/DC DET
Q109, 110
CN671
TO C CD C.B CN1
OPTICAL SUPPLY
Q660
CN670
TO C CD C.B CN5
D ONLY
E RELAY C.B
DECK
CN301
RPH
EH
CN351
B FRONT C.B
FL301 DISPLAY
Q311
ECO INDICATOR
LED301
Q312, 313
IC301 LC866548-V12
SYSTEM CONTROL
S301, 303, 305 S311, 313, 315 S317, 319
KEY MATRIX
S302, 304, 306 S308, 310, 312 S314, 318
KEY MATRIX
IC303 SPS-442-1-W
REMOTE SENSOR
LED302～306
FUNCTION LED
D320, 325, 327
D307～311
DIODE MATRIX
X301 4.19MHz
DIAL JOG S351
VOL S352
CN303
TO C CD C.B CN2
G DECK C.B
IC1 DM6851
SW2 SW3 SW4 SW5 SW6
SOL2
SFR1
TAPE SPEED ADJ
PIN1
CON302
Q301, 302 MOTOR SWITCHING
Q303 SOLENOID SWITCHING
M1 (DECK MOTOR)
J501 (2/2) FULL RANGE
J241 SUPER WOOFER
D101～104
D111～114
D PT C.B
CN101
PT101
MAIN PT
RELAY
RY102
VOLTAGE SELECTOR
SW101
HR, LH ONLY
-VFL VOLTAGE CONST
D121～124
Q105
RELAY CONTROL
Q101
D107, 108 AC DET
V_ECO
SUB PT
PT102
F101 FUSE
R105 2.2M
HOT (LIVE)
COLD (NEUTRAL)
D101～104

BLOCK DIAGRAM – 2 (CD / CD LOAD / CD DRIVE)


FROM B FRONT C.B CN303
TO A MAIN C.B CN671
C CD C.B
CN2
CQCK
RWC
SQOUT
WRQ
COIN
CDON
DRF
CD-OPEN
CD-CLOSE
CDTSW
CN1
CD-L
CD-R
+VM
X1
16.934MHZ
XIN
XOUT
MUTER
MUTEL
RCHO
LCHO
VDD
+5V
R
L
IC2
LC78622ED
DIGITAL SIGNAL PROCESSOR
WRQ
RWC
SQOUT
COIN
CQCK
PUIN
4.2M
MUTING
Q81∼84
Q99
CDON INVERTER
8V REGULATOR
Q90, 92, 94, 96, 98
+8V
IC6
NJM7805FA
VIN
DC REGULATOR (+5V)
GND
VOUT
+5V
RF CIRCUIT
I/O
7•9•10
1•12∼20•24•25
44∼41
49•40∼30
IC1
LA9241ML
ANALOG SIGNAL PROCESSOR
CLK
CL
DAT
CE
DRF
VCC2
VR
LDD
LDS
+5V
VREF
SP-
SPG
SP
SPINDLE CIRCUIT
SLD
SPD
FE-
FE
FA-
FA
FD
FOCUS CIRCUIT
FIN2
FIN1
E
F
TB-
TD
JP
TO
FD
12∼14
TRACKING CIRCUIT
Q1
LD SUPPLY SWITCHING
CDTSW
CD-CLOSE
CD-OPEN
VM
CLOSE
OPEN
VCC
OUT ⊖
OUT ⊕
IC10 TA7291S
MOTOR DRIVER
+8V
IC4 TA2092N
MOTOR COIL DRIVER
PVCC1
PVCC2
PVCC3
SVCC
PVCC4
IN
TRACKING
FOCUS
SLED
SPINDLE
F CD LOAD C.B
(CD MECHANISM 3ZG-3E3NM)
SW2 (CLOSE)
SW1 (OPEN)
M1
CN6
CON6 (LOADING MOTOR)
+5V
VREF
VC
VCC
E
D
A
B
C
F
GND
LD
VR
PD
F-
T-
T+
F+
CN4
CN3
SP+
SP-
SL+
SL-
PUIN
OPTICAL PICK UP ASSY KSS-213F
VREF
VCC
PDIC
LD
TRACKING COIL
FOCUS COIL
CON3
M20 (SPINDLE MOTOR)
M21 (SLED MOTOR)
SW1 (INSIDE LIMIT SWITCH)
H CD DRIVE C.B
(CD MECHANISM 3ZG-2E3NM)

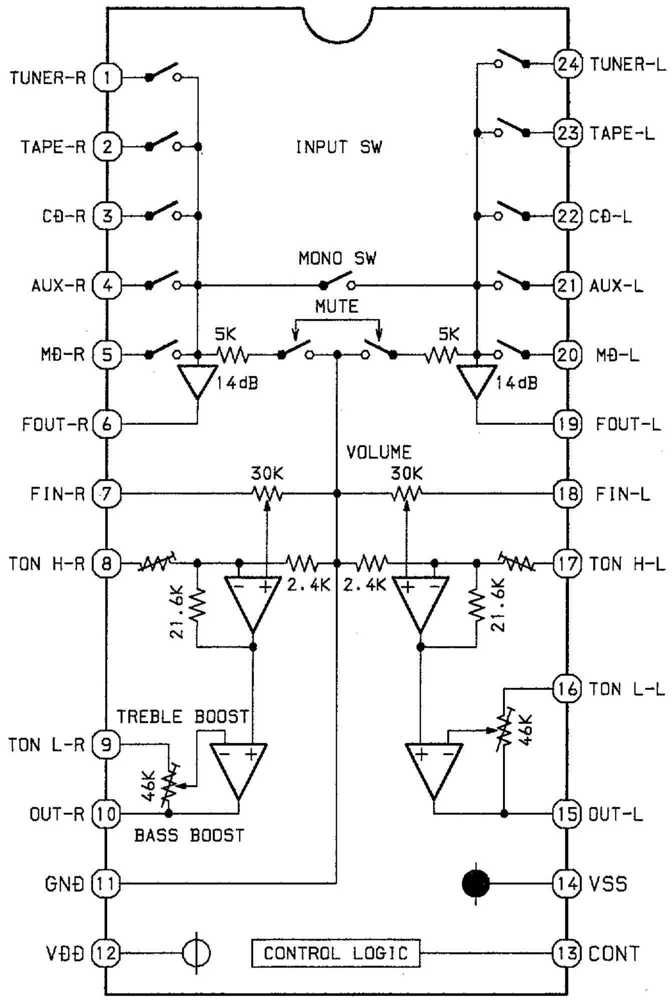
IC BLOCK DIAGRAM – 1

IC, TA2092N



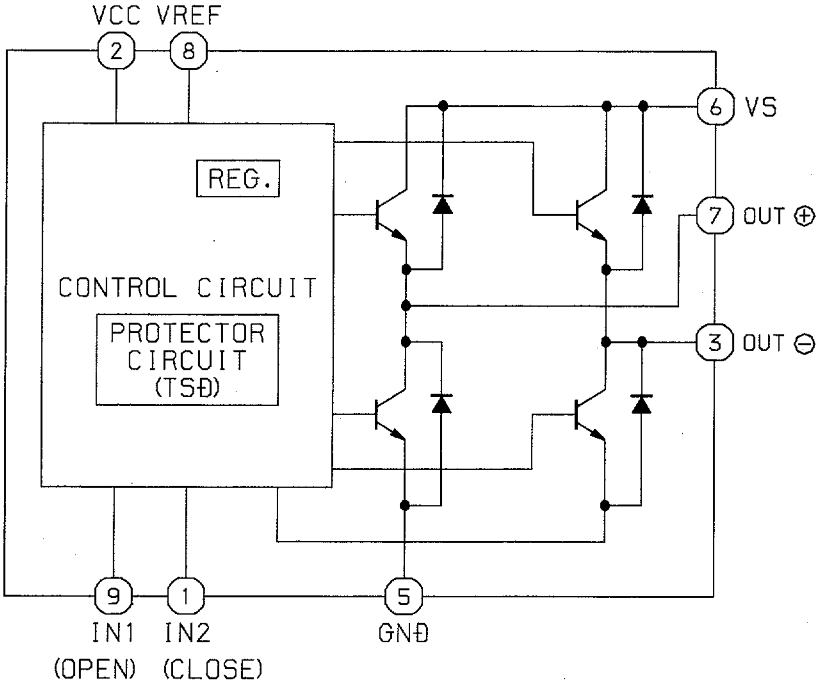
GND 1
⊖ 2
PVCC1 3
⊕ 4
IN 5
VR1 6
VC1 7
IN 8
⊕ 9
PVCC2 10
⊖ 11
GND 12
GND 13
⊖ 14
PVCC3 15
⊕ 16
IN 17
SGND 18
SVCC 19
IN 20
⊕ 21
PVCC4 22
⊖ 23
GND 24

IC, M62495FP



TUNER-R 1
TAPE-R 2
CD-R 3
AUX-R 4
MD-R 5
FOUT-R 6
FIN-R 7
TON H-R 8
TON L-R 9
OUT-R 10
GND 11
VDD 12
CONT 13
VSS 14
OUT-L 15
TON L-L 16
TON H-L 17
FIN-L 18
FOUT-L 19
MD-L 20
AUX-L 21
CD-L 22
TAPE-L 23
TUNER-L 24
INPUT SW
MONO SW
MUTE
5K
5K
14dB
14dB
VOLUME
30K
30K
2.4K
2.4K
21.6K
21.6K
TREBLE BOOST
BASS BOOST
46K
46K
CONTROL LOGIC

IC, TA7291S



VCC
VREF
2
8
6 VS
7 OUT ⊕
3 OUT ⊖
REG.
CONTROL CIRCUIT
PROTECTOR CIRCUIT (TSD)
9
1
5
IN1 (OPEN)
IN2 (CLOSE)
GND

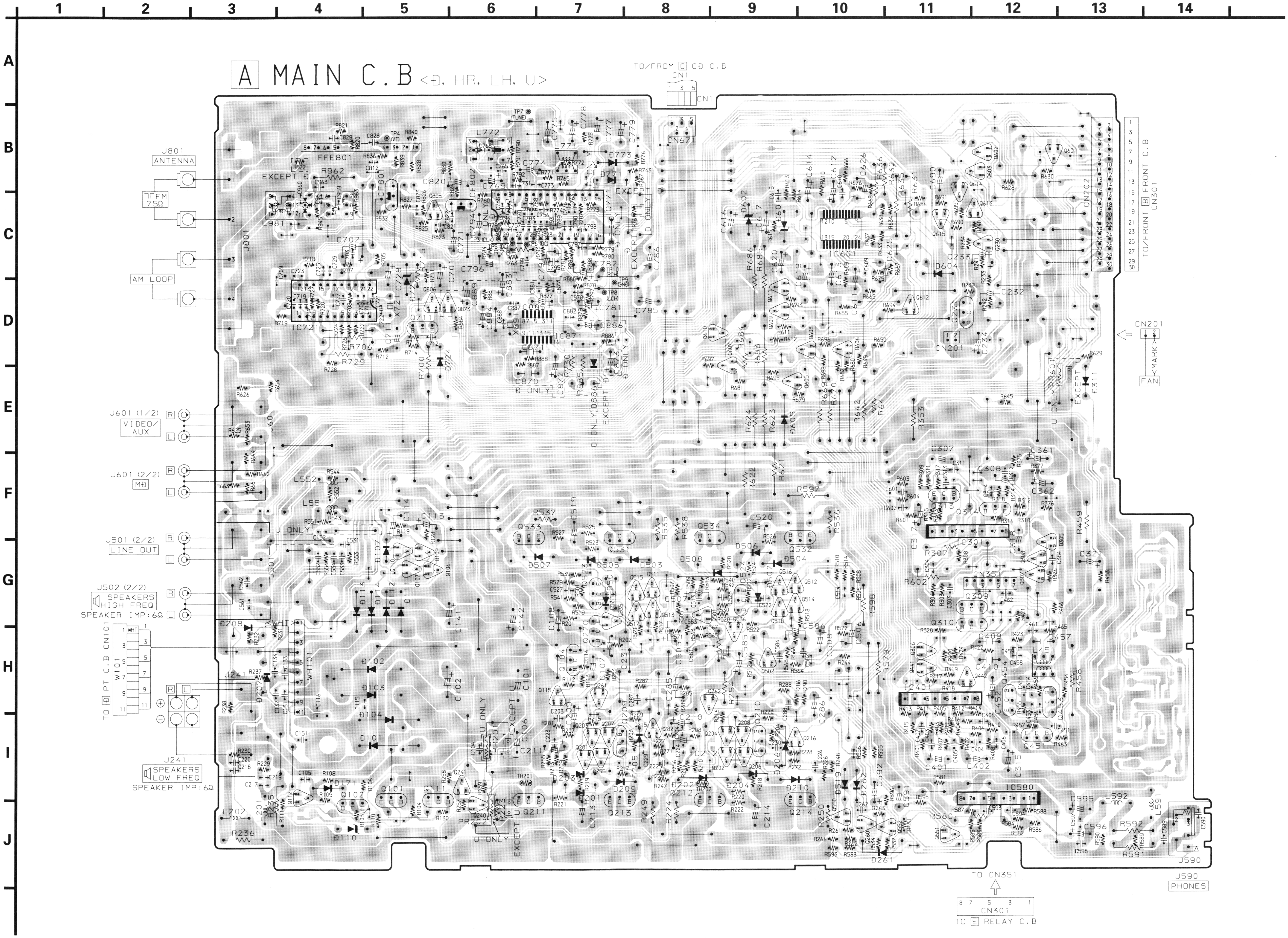
TRUTH TABLE

INPUT		OUTPUT		MODE
IN1	IN2	OUT1	OUT2	
0	0	∞	∞	STOP
1	0	H	L	CW
0	1	L	H	CCW
1	1	L	L	BRAKE

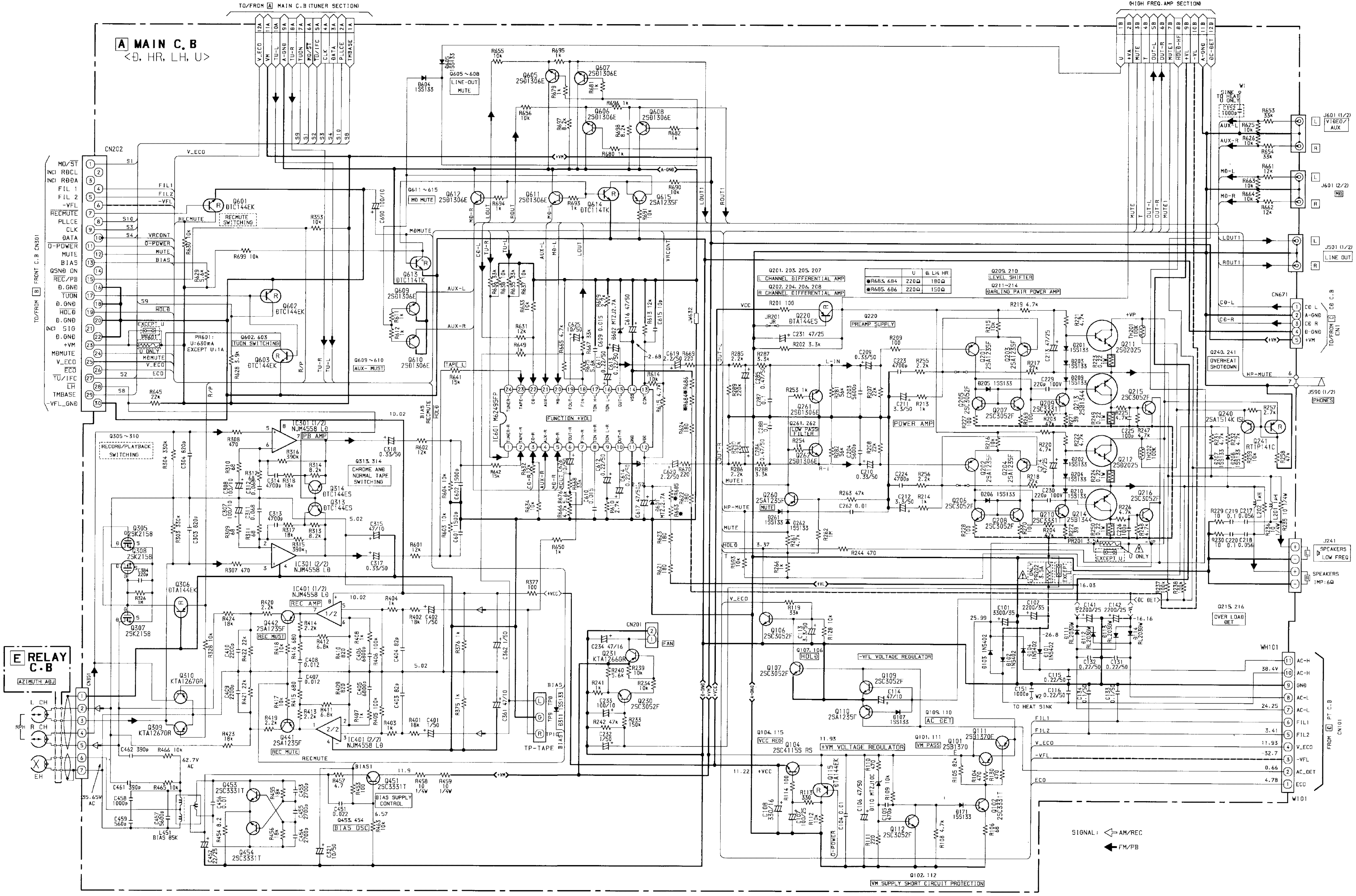
∞ :HIGH IMPEDACE

INPUT IS "H" ACITVE

WIRING – 1 (MAIN : D, HR, LH, U)

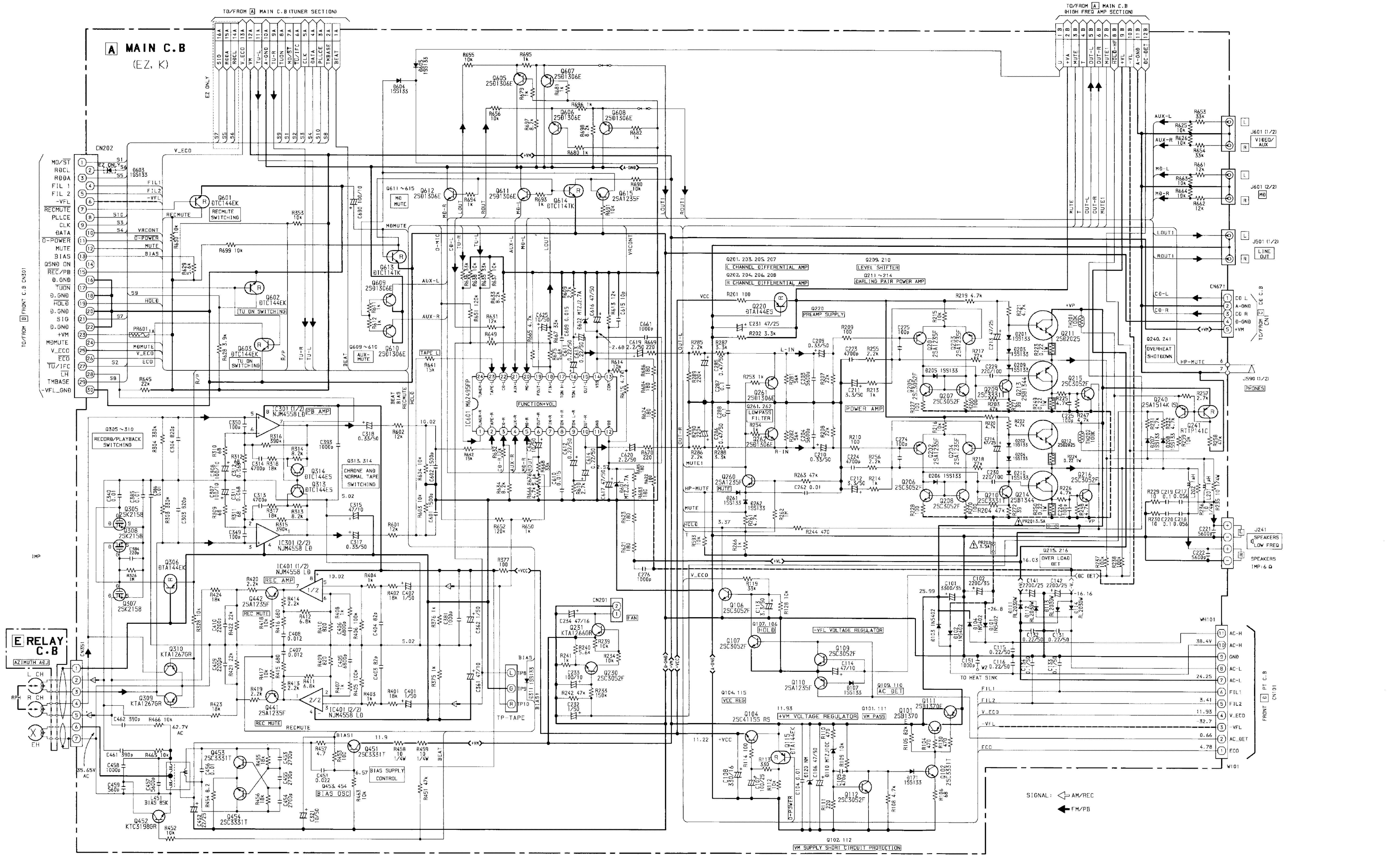

A MAIN C.B <Ð, HR, LH, U>
TO/FROM C CD C.B
CN1
CN671
J801
ANTENNA
FM 75Ω
AM LOOP
FFE801
EXCEPT Ð
L981
IC721
IC871
IC601
C870
Ð ONLY
CN201
TO/FRONT B FRONT C.B
CN301
CN202
FAN
<MARK>
J601 (1/2)
VIDEO/AUX
J601 (2/2)
MD
J501 (2/2)
LINE OUT
J502 (2/2)
SPEAKERS HIGH FREQ
SPEAKER IMP:6Ω
TO D PT C.B CN101
W101
WH101
J241
SPEAKERS LOW FREQ
SPEAKER IMP:6Ω
U ONLY
IC301
IC401
IC580
TO CN351
CN301
TO E RELAY C.B
J590
PHONES
1
2
3
4
5
6
7
8
9
10
11
12
13
14
A
B
C
D
E
F
G
H
I
J

SCHEMATIC DIAGRAM – 1 (MAIN : D, HR, LH, U)

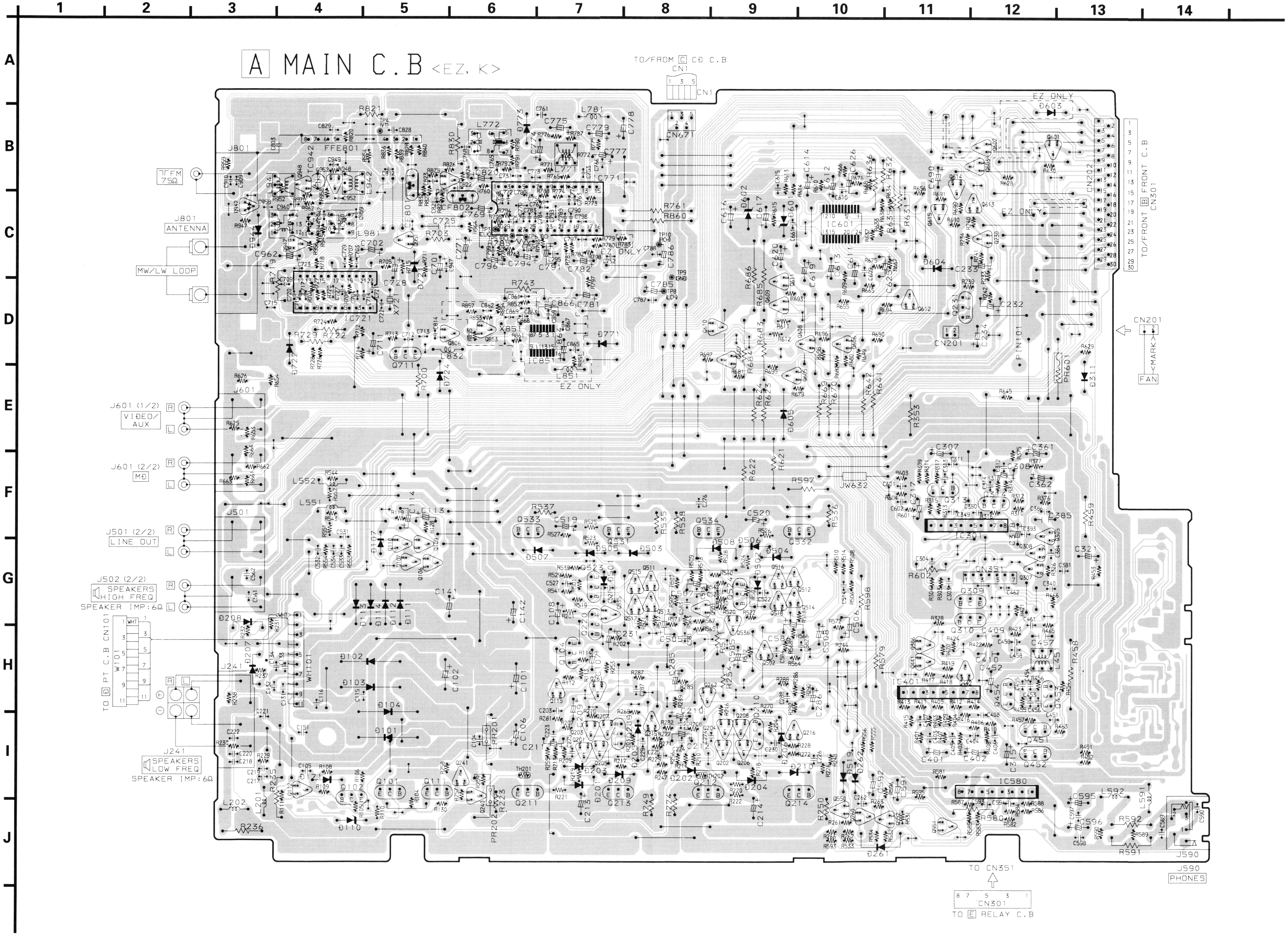


TO/FROM A MAIN C.B (TUNER SECTION)
A MAIN C.B
<D, HR, LH, U>
A MAIN C.B (HIGH FREQ.AMP SECTION)
CN202
TO/FROM B FRONT C.B CN301
MD/ST
RDCL
RDDA
FIL 1
FIL 2
-VFL
RECMUTE
PLLCE
CLK
DATA
D-POWER
MUTE
BIAS
GSND ON
REC/PB
D.GND
TUON
HOLD
SIG
+VM
MDMUTE
V_ECO
ECO
TU/IFC
LH
TMBASE
-VFL_GND
Q601 DTC144EK
RECMUTE SWITCHING
Q602 DTC144EK
Q603 DTC144EK
Q602, 603 TUON SWITCHING
PR601: U:630mA EXCEPT U:1A
Q604 1SS133
Q605~608 LINE-OUT MUTE
Q605 2SD1306E
Q606 2SD1306E
Q607 2SD1306E
Q608 2SD1306E
Q611~615 MD MUTE
Q612 2SD1306E
Q611 2SD1306E
Q614 DTC114TK
Q615 2SA1235F
Q613 DTC114TK
Q609 2SD1306E
Q610 2SD1306E
Q609~610 AUX-MUST
IC601 M62495FP
FUNCTION +VOL
Q305~310 RECORD/PLAYBACK SWITCHING
Q305 2SK2158
Q308 2SK2158
Q307 2SK2158
Q306 DTA144EK
IC301 (1/2) NJM4558 LD
PB AMP
IC301 (2/2) NJM4558 LD
Q313, 314 CHROME AND NORMAL TAPE SWITCHING
Q314 DTC144ES
Q313 DTC144ES
IC401 (1/2) NJM4558 LD
REC AMP
IC401 (2/2) NJM4558 LD
Q442 2SA1235F
REC MUST
Q441 2SA1235F
REC MUTE
Q310 KTA1267GR
Q309 KTA1267GR
E RELAY C.B
AZIMUTH ADJ
L CH
R CH
RPH
EH
L451 BIAS 85K
Q453 2SC3331T
Q454 2SC3331T
Q453, 454 BIAS OSC
Q451 2SC3331T
BIAS SUPPLY CONTROL
TP-TAPE
CN201
FAN
Q231 KTA1266GR
Q230 2SC3052F
Q201, 203, 205, 207 L CHANNEL DIFFERENTIAL AMP
Q202, 204, 206, 208 R CHANNEL DIFFERENTIAL AMP
Q209, 210 LEVEL SHIFTER
Q211~214 DARLING PAIR POWER AMP
Q220 DTA144ES
Q220 PREAMP SUPPLY
Q261, 262 LOW PASS FILTER
Q261 2SD1306E
Q262 2SD1306E
POWER AMP
Q211 2SD2025
Q212 2SD2025
Q213 2SB1344
Q214 2SB1344
Q215 2SC3052F
Q216 2SC3052F
Q240, 241 OVERHEAT SHOTDOWN
Q240 2SA1514K
Q241 RT1P141C
Q260 2SA1235F
Q215, 216 OVER LOAD DET
J601 (1/2) VIDEO/AUX
J601 (2/2) MD
J501 (1/2) LINE OUT
J590 (1/2) PHONES
J241 SPEAKERS LOW FREQ
SPEAKERS IMP:6Ω
CN671
TO/FROM C CD C.B CN1
WH101
FROM D PT C.B CN101
AC-H
GND
AC-L
FIL1
FIL2
V_ECO
-VFL
AC_DET
ECO
W101
Q106 2SC3052F
Q107 2SC3052F
Q107, 106 HOLD
-VFL VOLTAGE REGULATOR
Q109 2SC3052F
Q110 2SA1235F
Q109, 110 AC DET
Q104, 115 VCC REG
Q104 2SC4115S RS
+VM VOLTAGE REGULATOR
Q101, 111 VM PASS
Q101 2SB1370
Q111 2SB1370F
Q115 DTA144EK
Q112 2SC3052F
Q102 2SC3052F
Q102, 112 VM SUPPLY SHORT CIRCUIT PROTECTION
TO HEAT SINK
SINK TO HEAT D ONLY
SIGNAL: AM/REC
FM/PB

SCHEMATIC DIAGRAM – 2 (MAIN : EZ, K)


A MAIN C.B
(EZ, K)
TO/FROM A MAIN C.B (TUNER SECTION)
TO/FROM A MAIN C.B (HIGH FREQ AMP SECTION)
TO/FROM B FRONT C.B CN301
CN202
EZ ONLY
Q601 DTC144EK RECMUTE SWITCHING
Q602 DTC144EK TU ON SWITCHING
Q603 DTC144EK TU ON SWITCHING
Q611~615 MD MUTE
Q609~610 AUX-MUTE
IC601 M62495FP
FUNCTION+VOL
Q305~310 RECORD/PLAYBACK SWITCHING
IC301 (1/2) NJM4558LD PB AMP
IC301 (2/2) NJM4558LD
Q313, 314 CHROME AND NORMAL TAPE SWITCHING
IC401 (1/2) NJM4558LD REC AMP
IC401 (2/2) NJM4558LD
REC MUTE
Q453, 454 BIAS OSC
Q451 BIAS SUPPLY CONTROL
E RELAY C.B
AZIMUTH ADJ
TP-TAPE
CN201 FAN
Q201, 203, 205, 207 L CHANNEL DIFFERENTIAL AMP
Q202, 204, 206, 208 R CHANNEL DIFFERENTIAL AMP
Q209, 210 LEVEL SHIFTER
Q211~214 DARLING PAIR POWER AMP
Q220 PREAMP SUPPLY
Q261, 262 LOWPASS FILTER
POWER AMP
Q260 MUTE
Q240, 241 OVERHEAT SHUTDOWN
Q215, 216 OVER LOAD DET
Q107, 106 HOLD
-VFL VOLTAGE REGULATOR
Q109, 110 AC DET
Q104, 115 VCC REG
Q104 2SC4115S RS +VM VOLTAGE REGULATOR
Q101, 111 VM PASS
Q102, 112 VM SUPPLY SHORT CIRCUIT PROTECTION
TO HEAT SINK
J601 (1/2) VIDEO/AUX
J601 (2/2) MD
J501 (1/2) LINE OUT
CN671 TO/FROM C CD C.B CN1
J590 (1/2) PHONES
J241 SPEAKERS LOW FREQ
SPEAKERS IMP: 6 Ω
WH101
W101
FRONT D PT C.B CN101
SIGNAL: AM/REC
FM/PB

WIRING – 2 (MAIN : EZ, K)


1
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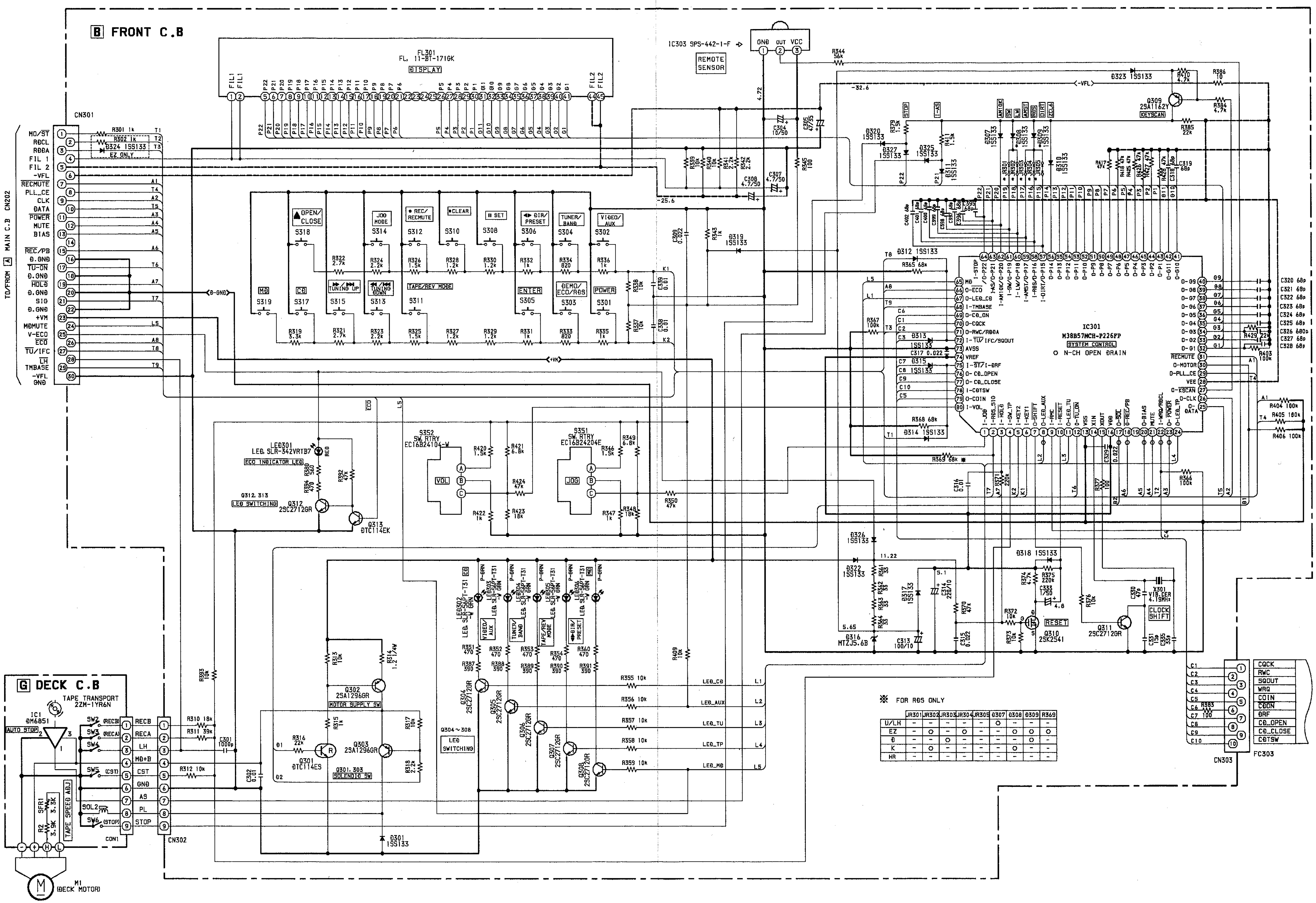
13
14
A
B
C
D
E
F
G
H
I
J
A MAIN C.B <EZ, K>
TO/FROM C CD C.B
CN1
CN671
FM 75Ω
J801
J801 ANTENNA
MW/LW LOOP
IC721
IC771
IC851
IC601
IC301
IC401
IC580
EZ ONLY
CN202
TO/FRONT B FRONT C.B CN301
CN201
<MARK>
FAN
J601 (1/2)
VIDEO/AUX
J601 (2/2)
MD
J501
J501 (2/2)
LINE OUT
J502 (2/2)
SPEAKERS HIGH FREQ
SPEAKER IMP: 6Ω
TO D PT C.B CN101
W101
WH101
J241
SPEAKERS LOW FREQ
SPEAKER IMP: 6Ω
CN351
PIN101
PR601
JW632
J590
J590 PHONES
TO CN351
CN301
TO E RELAY C.B
R
L

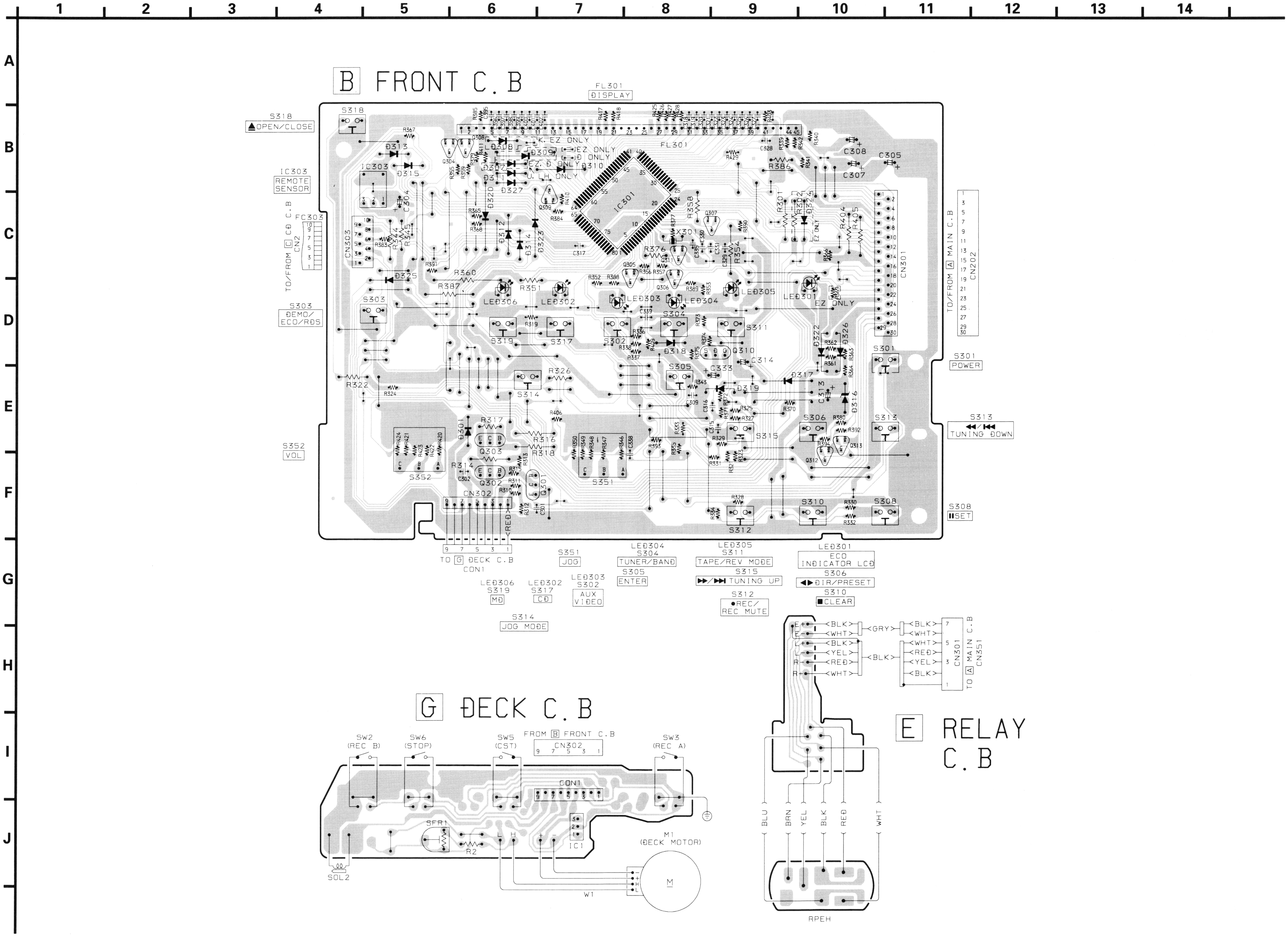
SCHEMATIC DIAGRAM – 3 (FRONT / DECK / RELAY)


B FRONT C.B
FL301
FL, 11-BT-171GK
DISPLAY
IC303 SPS-442-1-F
REMOTE SENSOR
GND OUT VCC
CN301
TO/FROM A MAIN C.B CN202
MO/ST
RDCL
RDDA
FIL 1
FIL 2
-VFL
RECMUTE
PLL_CE
CLK
DATA
POWER
MUTE
BIAS
REC/PB
D.GND
TU-ON
D.GND
HOLD
D.GND
SIG
D.GND
+VM
MDMUTE
V-ECO
ECO
TU/IFC
LH
TMBASE
-VFL
GND
D324 1SS133
EZ ONLY
OPEN/CLOSE
S318
JOG MODE
S314
REC/RECMUTE
S312
CLEAR
S310
SET
S308
DIR/PRESET
S306
TUNER/BAND
S304
VIDEO/AUX
S302
MD
S319
CD
S317
TUNING UP
S315
TUNING DOWN
S313
TAPE/REV MODE
S311
ENTER
S305
DEMO/ECO/RDS
S303
POWER
S301
IC301
M38B57MCH-P226FP
SYSTEM CONTROL
O N-CH OPEN DRAIN
LED301
LED, SLR-342VRTB7
ECO INDICATOR LED
Q312, 313
LED SWITCHING
Q312 2SC2712GR
Q313 DTC114EK
S352
SW, RTRY
EC16B24104-W
VOL
S351
SW, RTRY
EC16B24204E
JOG
Q302 2SA1296GR
MOTOR SUPPLY SW
Q301 DTC114ES
Q303 2SA1296GR
Q301, 303
SOLENOID SW
Q304~308
LED SWITCHING
VIDEO/AUX
TUNER/BAND
TAPE/REV MODE
DIR/PRESET
Q304 2SC2712GR
Q305 2SC2712GR
Q306 2SC2712GR
Q307 2SC2712GR
Q308 2SC2712GR
D301 1SS133
D316 MTZJ5.6B
Q310 2SK2541
RESET
Q311 2SC2712GR
X301 VIB,CER 4.19MHz
CLOCK SHIFT
Q309 2SA1162Y
KEYSCAN
CN303
FC303
TO/FROM C CD C.B CN2
CQCK
RWC
SQOUT
WRQ
COIN
CDON
DRF
CD_OPEN
CD_CLOSE
CDTSW
G DECK C.B
TAPE TRANSPORT
2ZM-1YR6N
IC1
DM6851
AUTO STOP
SW2 (RECB)
SW3 (RECA)
SW4
SW5 (CST)
SOL2
SW6 (STOP)
RECB
RECA
LH
MD+B
CST
GND
AS
PL
STOP
CON1
CN302
SFR1
TAPE SPEED ADJ
M1
(DECK MOTOR)

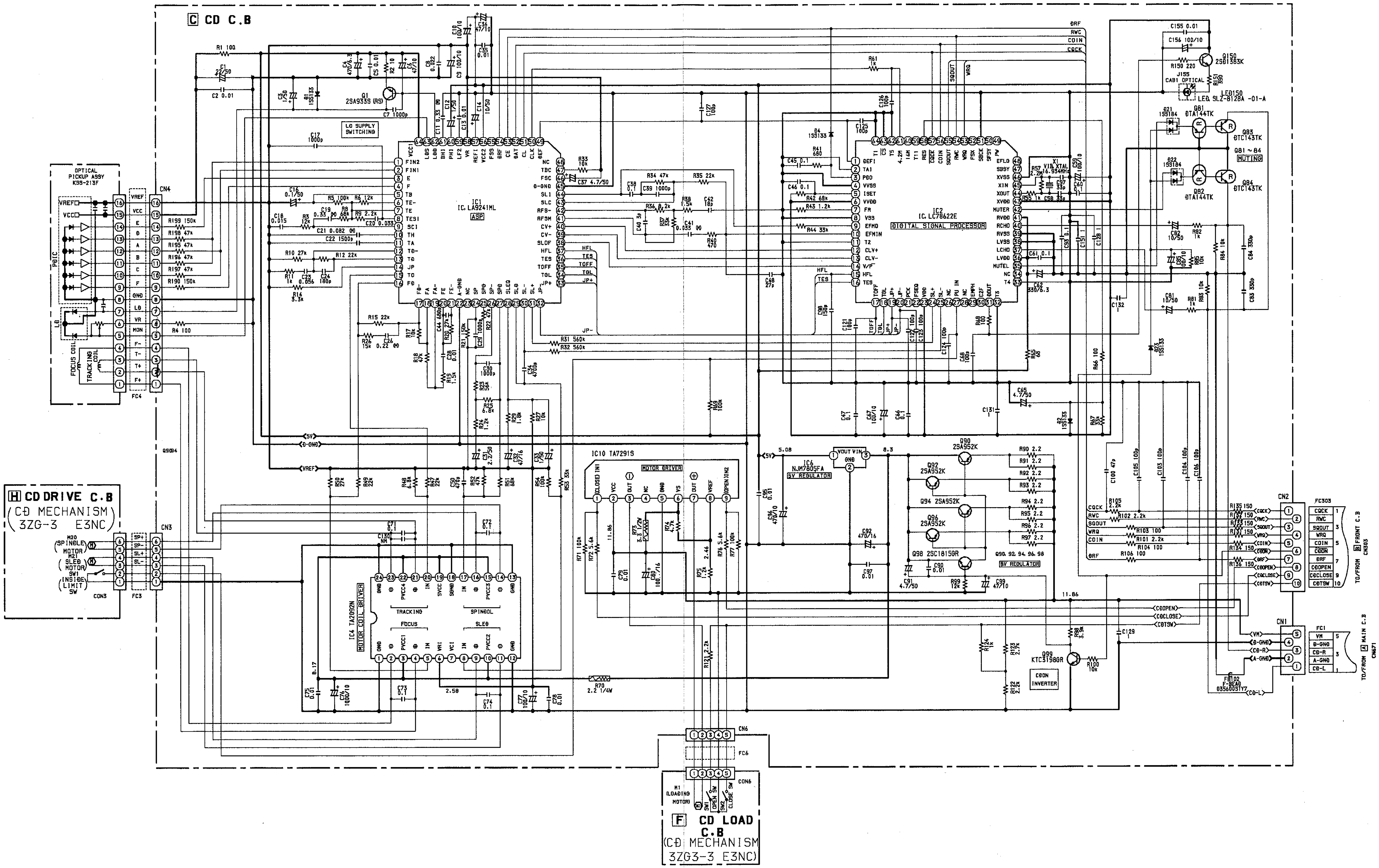
※ FOR RDS ONLY

	JR301	JR302	JR303	JR304	JR305	D307	D308	D309	R369
U/LH	-	-	-	-	-	○	-	-	-
EZ	-	○	-	○	-	-	○	○	○
D	-	-	○	-	-	-	-	○	-
K	-	○	-	-	-	-	○	-	-
HR	-	-	-	-	-	-	-	-	-

WIRING – 3 (FRONT / DECK / RELAY)

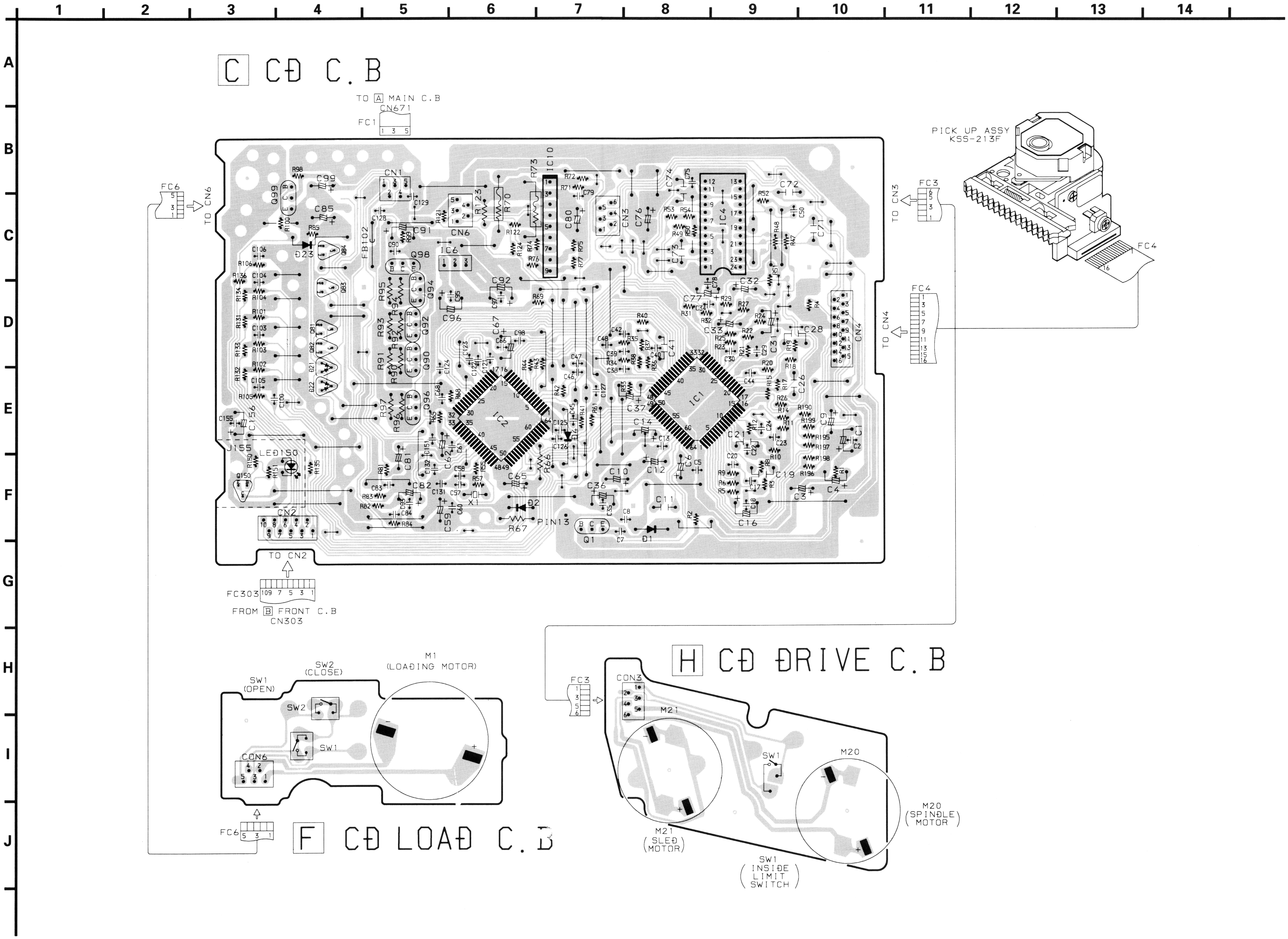

B FRONT C.B
FL301 DISPLAY
S318 ▲OPEN/CLOSE
IC303 REMOTE SENSOR
TO/FROM C CD C.B FC303 CN2
S303 DEMO/ECO/RDS
S352 VOL
TO/FROM A MAIN C.B CN202
S301 POWER
S313 ◀◀/◀◀ TUNING DOWN
S308 ▮▮SET
TO G DECK C.B CON1
S351 JOG
LED304 S304 TUNER/BAND
S305 ENTER
LED305 S311 TAPE/REV MODE
S315 ▶▶/▶▶▮ TUNING UP
S312 ●REC/REC MUTE
LED301 ECO INDICATOR LCD
S306 ◀▶DIR/PRESET
S310 ■CLEAR
LED306 S319 MD
LED302 S317 CD
LED303 S302 AUX VIDEO
S314 JOG MODE
TO A MAIN C.B CN301 CN351
G DECK C.B
SW2 (REC B)
SW6 (STOP)
SW5 (CST)
FROM B FRONT C.B CN302
SW3 (REC A)
CON1
SFR1
R2
IC1
M1 (DECK MOTOR)
W1
SOL2
E RELAY C.B
BLU
BRN
YEL
BLK
RED
WHT
RPEH

SCHEMATIC DIAGRAM – 4 (CD / CD LOAD / CD DRIVE)

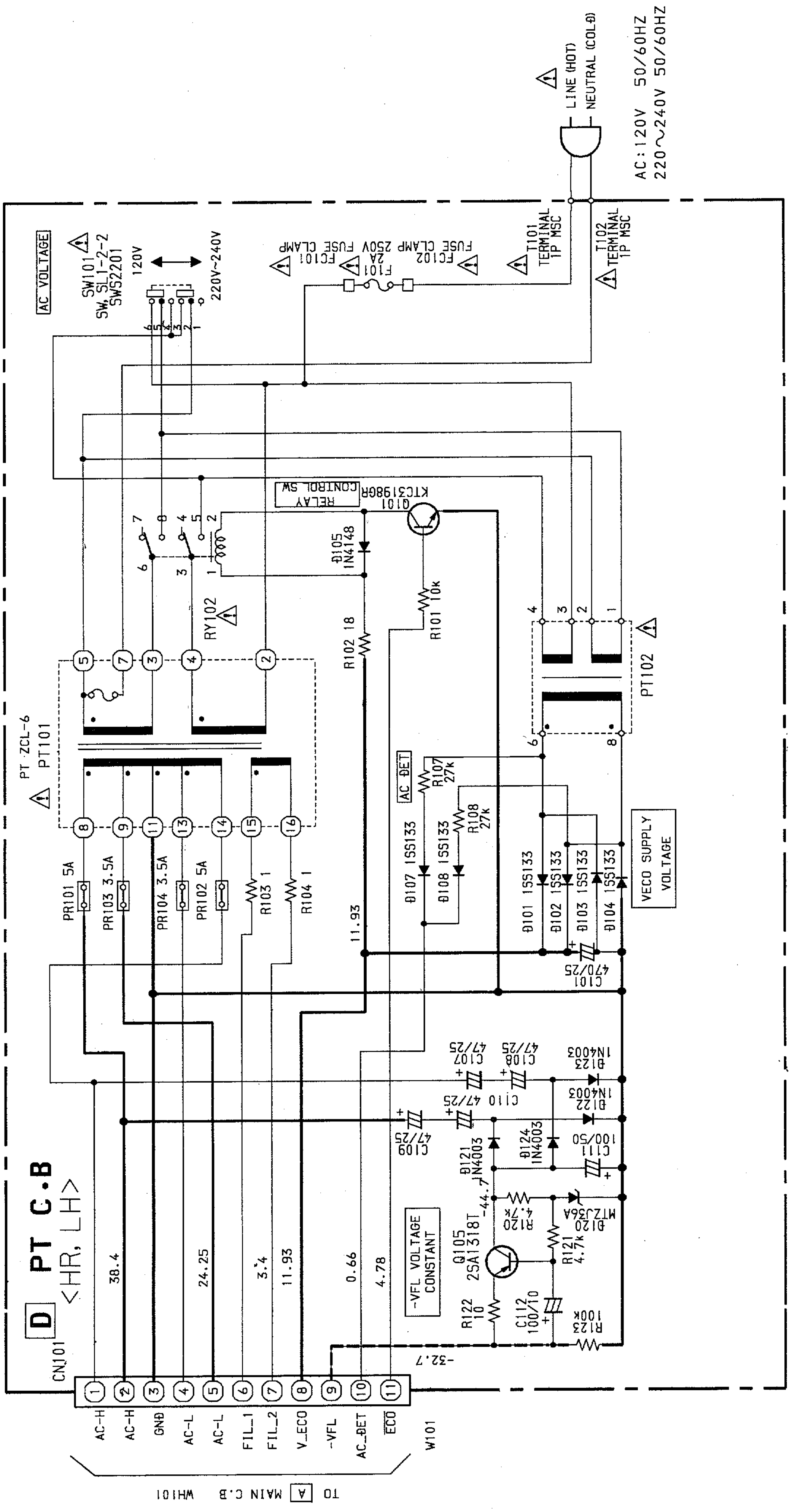


C CD C.B
OPTICAL PICKUP ASSY KSS-213F
PDIC
LD
FOCUS COIL
TRACKING COIL
FC4
CN4
LD SUPPLY SWITCHING
Q1 2SA933S (RS)
D1 1SS133
IC1 IC LA9241ML
ASP
IC2 IC LC78622E
DIGITAL SIGNAL PROCESSOR
X1 VIB.XTAL 16.934MHz
Q150 2SD1383K
J155 CAB1 OPTICAL
LED150 LED SLZ-8128A -01-A
Q81 DTA144TK
Q82 DTA144TK
Q83 DTC143TK
Q84 DTC143TK
Q81 ~ 84 MUTING
H CD DRIVE C.B
(CD MECHANISM 3ZG-3 E3NC)
M20 SPINDLE MOTOR
M21 SLED MOTOR
SW1 INSIDE LIMIT SW
CON3
FC3
CN3
IC4 TA2092N
MOTOR COIL DRIVER
TRACKING
FOCUS
SPINDOL
SLED
IC10 TA7291S
MOTOR DRIVER
IC6 NJM7805FA
5V REGULATOR
Q90 2SA952K
Q92 2SA952K
Q94 2SA952K
Q96 2SA952K
Q98 2SC1815GR
Q90, 92, 94, 96, 98
5V REGULATOR
Q99 KTC3198GR
CDON INVERTER
CN2
FC303
CQCK
RWC
SQOUT
WRQ
COIN
CDON
BRF
CDOPEN
CDCLOSE
CDTSW
TO/FROM B FRONT C.B CN303
CN1
FC1
VM
B-GND
CD-R
A-GND
CD-L
TO/FROM A MAIN C.B CN671
FB102 F-BEAD 0356003TY7
CN6
FC6
CON6
M1 LOADING MOTOR
SW1 OPEN SW
SW2 CLOSE SW
F CD LOAD C.B
(CD MECHANISM 3ZG3-3 E3NC)

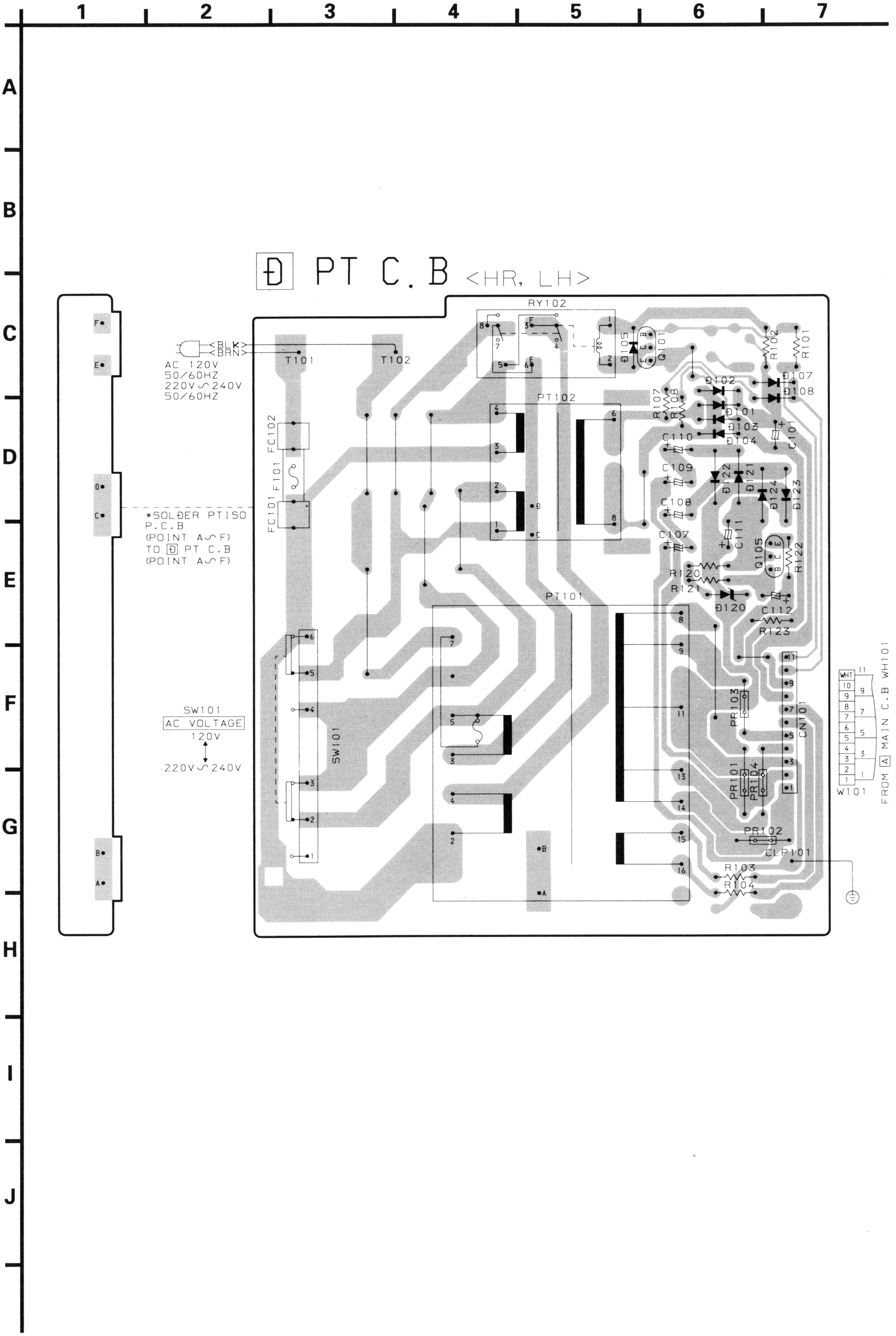
WIRING – 4 (CD / CD LOAD / CD DRIVE)


1 2 3 4 5 6 7 8 9 10 11 12 13 14
A B C D E F G H I J
C CD C.B
TO A MAIN C.B
CN671
FC1
PICK UP ASSY
KSS-213F
FC3
TO CN3
FC4
TO CN4
FC6
TO CN6
CN1
CN2
CN3
CN4
CN6
IC1
IC2
IC4
IC6
IC10
FB102
LED150
J155
X1
PIN13
TO CN2
FC303
FROM B FRONT C.B
CN303
SW1
(OPEN)
SW2
(CLOSE)
M1
(LOADING MOTOR)
CON6
F CD LOAD C.B
FC6
FC3
CON3
H CD DRIVE C.B
M21
M20
M21
(SLED MOTOR)
M20
(SPINDLE MOTOR)
SW1
INSIDE LIMIT SWITCH

SCHEMATIC DIAGRAM – 5 (PT : HR, LH)


D PT C·B
<HR, LH>
AC VOLTAGE
SW101
SW,SL1-2-2
SW52201
120V
220V~240V
FC101
F101
2A
FUSE CLAMP 250V FUSE CLAMP
FC102
FUSE CLAMP
T101
TERMINAL
1P MSC
T102
TERMINAL
1P MSC
LINE (HOT)
NEUTRAL (COLD)
AC:120V 50/60HZ
220~240V 50/60HZ
Q101
KTC3198GR
RELAY
CONTROL SW
D105
1N4148
RY102
R102 18
R101 10k
PT·ZCL-6
PT101
PT102
AC DET
R107
27k
R108
27k
D107 1SS133
D108 1SS133
D101 1SS133
D102 1SS133
D103 1SS133
D104 1SS133
VECO SUPPLY
VOLTAGE
C101
470/25
PR101 5A
PR103 3.5A
PR104 3.5A
PR102 5A
R103 1
R104 1
11.93
C107
47/25
C108
47/25
D123
1N4003
C110 47/25
D122
1N4003
C109
47/25
D121
1N4003
D124
1N4003
C111
100/50
-44.7
R120
4.7k
D120
MTZJ36A
R121
4.7k
-VFL VOLTAGE
CONSTANT
Q105
2SA1318T
R122
10
C112
100/10
R123
100k
-32.7
38.4
24.25
3.4
11.93
0.66
4.78
CN101
AC-H
AC-H
GND
AC-L
AC-L
FIL_1
FIL_2
V_ECO
-VFL
AC_DET
ECO
W101
TO A MAIN C.B WH101

WIRING – 5 (PT : HR, LH)



1
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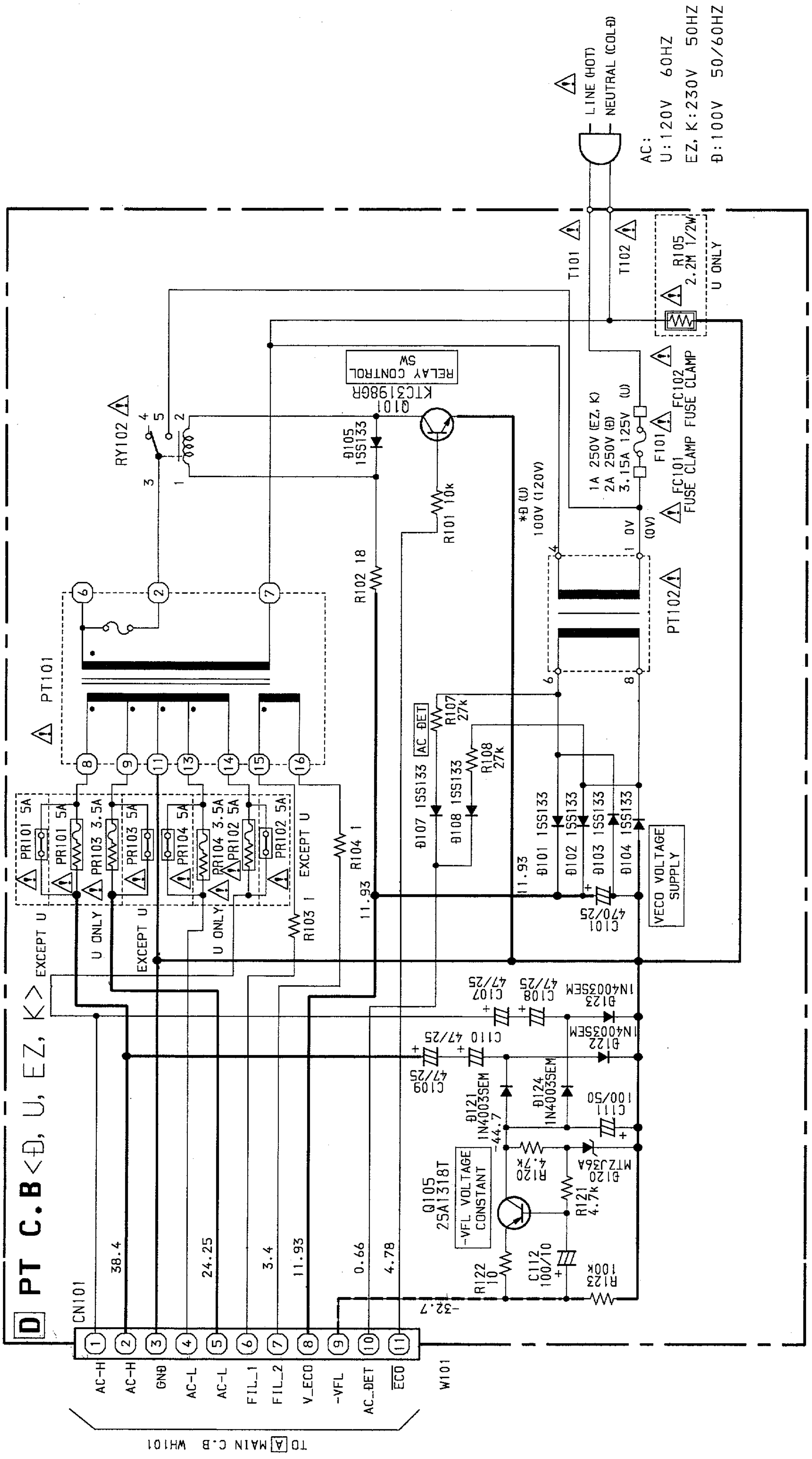
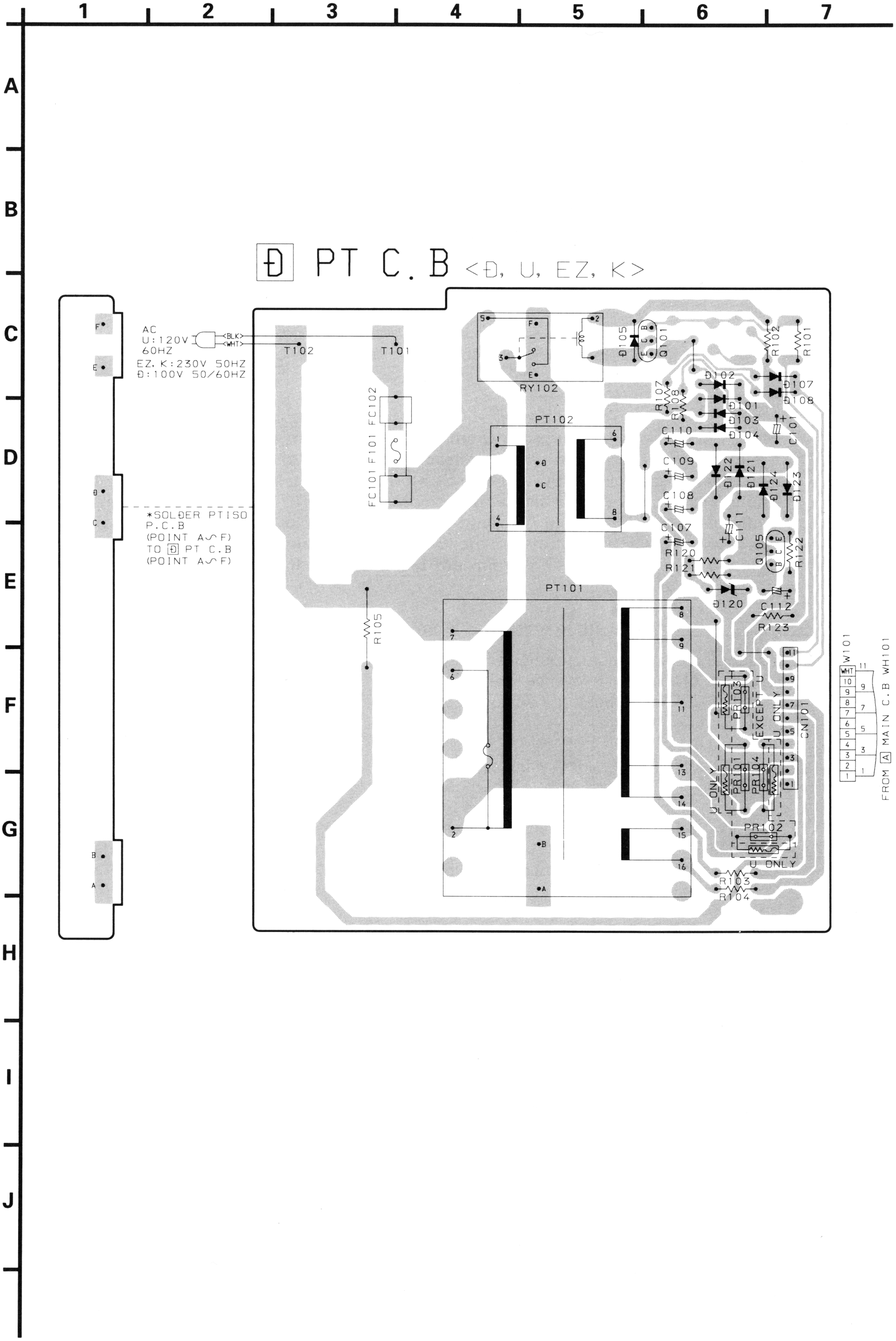
7
A
B
C
D
E
F
G
H
I
J
Đ PT C.B <HR, LH>
F
E
D
C
B
A
<BLK>
<BRN>
AC 120V
50/60HZ
220V∽240V
50/60HZ
*SOLDER PTISO
P.C.B
(POINT A∽F)
TO Đ PT C.B
(POINT A∽F)
SW101
AC VOLTAGE
120V
220V∽240V
T101
T102
FC102
F101
FC101
SW101
RY102
PT102
PT101
Đ105
Q101
R102
R101
Đ102
Đ107
Đ108
R107
R108
Đ101
Đ103
Đ104
C101
C110
C109
C108
C107
Đ122
Đ121
Đ124
Đ123
C111
Q105
R122
R120
R121
Đ120
C112
R123
PR103
PR101
PR104
PR102
CN101
CLP101
R103
R104
WHT
W101
FROM A MAIN C.B WH101

SCHEMATIC DIAGRAM – 6 (PT : D, U, EZ, K)


D PT C.B <Ð, U, EZ, K>
LINE (HOT)
NEUTRAL (COLÐ)
AC:
U:120V 60HZ
EZ, K:230V 50HZ
Ð:100V 50/60HZ
T101
T102
R105 2.2M 1/2W
U ONLY
FC102 FUSE CLAMP
FC101 FUSE CLAMP
F101
1A 250V (EZ, K)
2A 250V (Ð)
3.15A 125V (U)
*Ð (U)
100V (120V)
0V
(0V)
PT102
RY102
Ð105 1SS133
Q101 KTC3198GR
RELAY CONTROL SW
R101 10k
R102 18
PT101
R107 27k
AC DET
R108 27k
Ð107 1SS133
Ð108 1SS133
Ð101 1SS133
Ð102 1SS133
Ð103 1SS133
Ð104 1SS133
C101 470/25
VECO VOLTAGE SUPPLY
11.93
PR101 5A
PR103 3.5A
PR103 5A
PR104 5A
PR104 3.5A
PR102 5A
EXCEPT U
U ONLY
R103 1
R104 1
C107 47/25
C108 47/25
Ð123 1N4003SEM
C110 47/25
Ð122 1N4003SEM
C109 47/25
Ð121 1N4003SEM
Ð124 1N4003SEM
C111 100/50
-44.7
R120 4.7k
Ð120 MTZJ36A
Q105 2SA1318T
-VFL VOLTAGE CONSTANT
R121 4.7k
R122 10
C112 100/10
R123 100k
-32.7
38.4
24.25
3.4
11.93
0.66
4.78
CN101
AC-H
AC-H
GNÐ
AC-L
AC-L
FIL_1
FIL_2
V_ECO
-VFL
AC_DET
ECO
W101
TO A MAIN C.B WH101

WIRING – 6 (PT : D, U, EZ, K)


1
2
3
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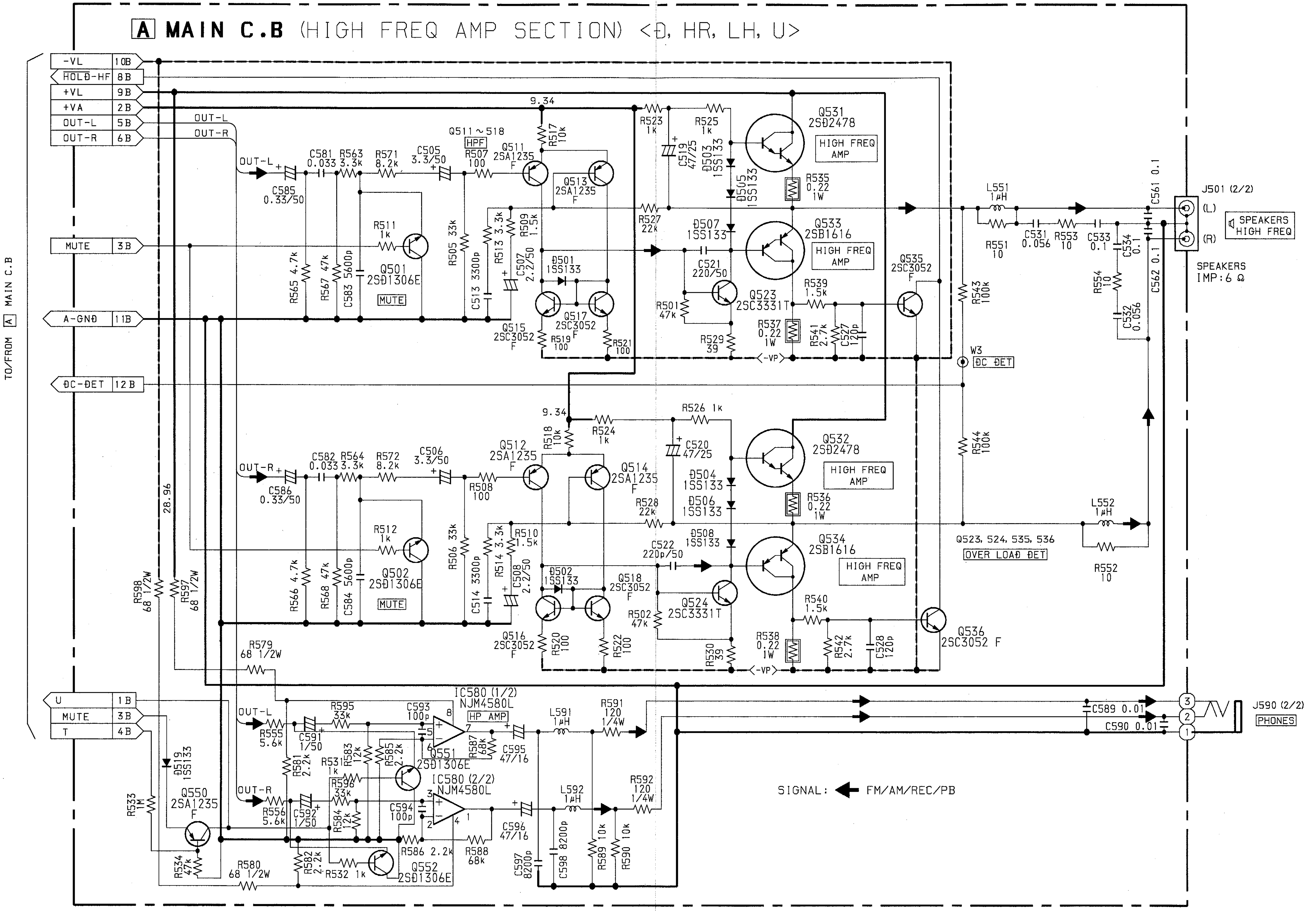
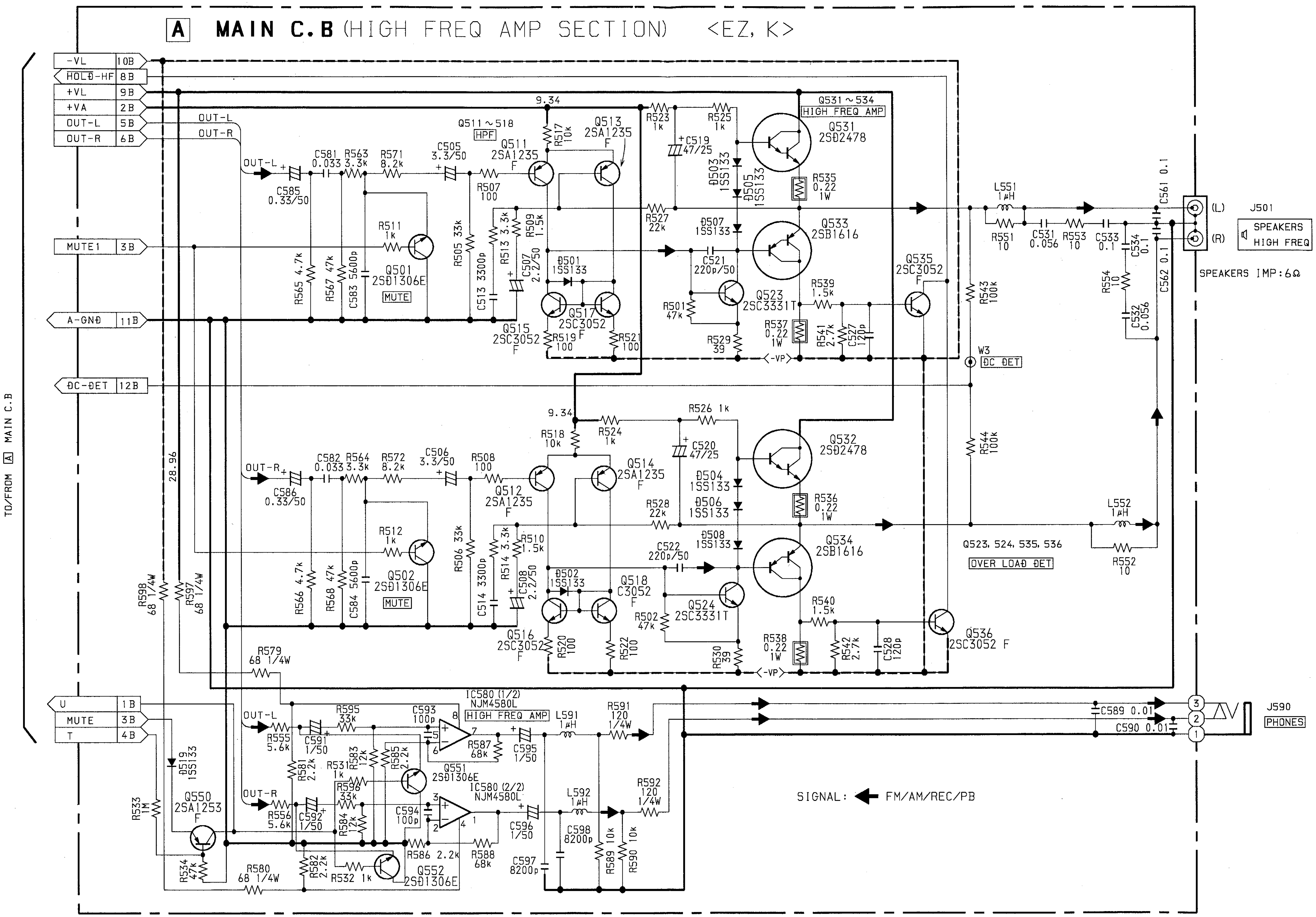
5
6
7
A
B
C
D
E
F
G
H
I
J
Đ PT C.B <Đ, U, EZ, K>
AC
U:120V
60HZ
EZ, K:230V 50HZ
Đ:100V 50/60HZ
<BLK>
<WHT>
T102
T101
FC101 F101 FC102
RY102
Đ105
E C B
Q101
R102
R101
Đ102
Đ107
Đ108
R107
R108
Đ101
Đ103
Đ104
C101
C110
C109
C108
C107
Đ122
Đ121
Đ124
Đ123
C111
Q105
B C E
R122
R120
R121
Đ120
C112
R123
PT102
PT101
R105
*SOLDER PTISO
P.C.B
(POINT A∽F)
TO Đ PT C.B
(POINT A∽F)
PR103
EXCEPT U
U ONLY
CN101
U ONLY
PR101
PR104
PR102
U ONLY
R103
R104
W101
WHT
FROM A MAIN C.B WH101
A
B
C
Đ
E
F

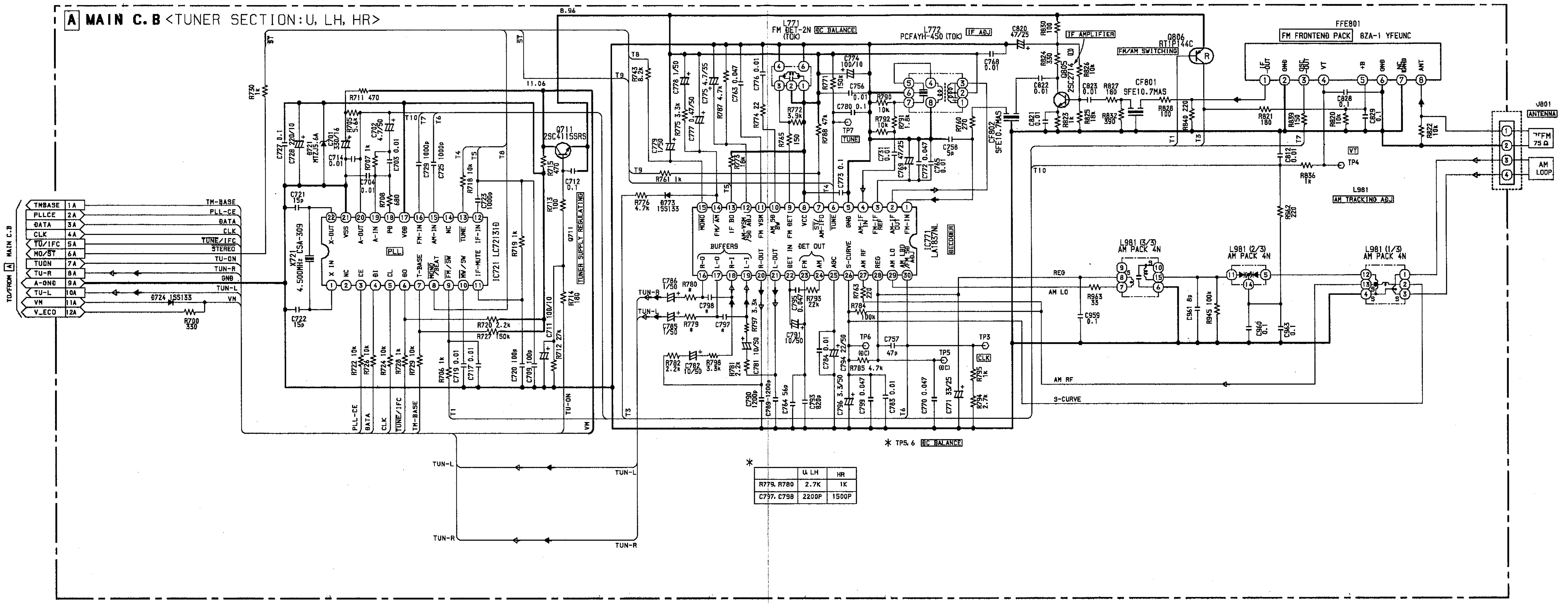
SCHEMATIC DIAGRAM – 7 (MAIN 1 / 2 : HIGH FREQ SECTION : D, HR, LH, U)


A MAIN C.B (HIGH FREQ AMP SECTION) <Ð, HR, LH, U>
TO/FROM A MAIN C.B
-VL 10B
HOLÐ-HF 8B
+VL 9B
+VA 2B
OUT-L 5B
OUT-R 6B
MUTE 3B
A-GNÐ 11B
ÐC-ÐET 12B
U 1B
MUTE 3B
T 4B
OUT-L
OUT-R
9.34
28.96
C581 0.033
R563 3.3k
R571 8.2k
C505 3.3/50
Q511~518
HPF
R507 100
Q511 2SA1235 F
Q513 2SA1235 F
R517 10k
C585 0.33/50
R511 1k
Q501 2SÐ1306E
MUTE
R565 4.7k
R567 47k
C583 5600p
R505 33k
C513 3300p
R513 3.3k
R509 1.5k
C507 2.2/50
Ð501 1SS133
Q515 2SC3052 F
Q517 2SC3052 F
R519 100
R521 100
R523 1k
R525 1k
C519 47/25
Ð503 1SS133
Ð505 1SS133
Q531 2SÐ2478
HIGH FREQ AMP
R535 0.22 1W
R527 22k
Ð507 1SS133
Q533 2SB1616
HIGH FREQ AMP
C521 220/50
R501 47k
Q523 2SC3331T
R539 1.5k
Q535 2SC3052 F
R529 39
R537 0.22 1W
R541 2.7k
C527 120p
-VP
R543 100k
W3
ÐC ÐET
L551 1μH
R551 10
C531 0.056
R553 10
C533 0.1
C534 0.1
C561 0.1
C562 0.1
R554 10
C532 0.056
J501 (2/2)
(L)
(R)
SPEAKERS HIGH FREQ
SPEAKERS IMP: 6 Ω
9.34
R526 1k
R524 1k
C520 47/25
R518 10k
Q512 2SA1235 F
Q514 2SA1235 F
Q532 2SÐ2478
HIGH FREQ AMP
C582 0.033
R564 3.3k
R572 8.2k
C506 3.3/50
R508 100
C586 0.33/50
Ð504 1SS133
Ð506 1SS133
R528 22k
R536 0.22 1W
R544 100k
L552 1μH
R552 10
Q523, 524, 535, 536
OVER LOAÐ ÐET
R512 1k
Q502 2SÐ1306E
MUTE
R566 4.7k
R568 47k
C584 5600p
R506 33k
C514 3300p
R514 3.3k
R510 1.5k
C508 2.2/50
Ð502 1SS133
Q518 2SC3052 F
Ð508 1SS133
C522 220p/50
Q524 2SC3331T
Q534 2SB1616
HIGH FREQ AMP
R540 1.5k
Q536 2SC3052 F
R502 47k
Q516 2SC3052 F
R520 100
R522 100
R530 39
R538 0.22 1W
R542 2.7k
C528 120p
-VP
R598 68 1/2W
R597 68 1/2W
R579 68 1/2W
IC580 (1/2) NJM4580L
HP AMP
R595 33k
C593 100p
R555 5.6k
C591 1/50
Q551 2SÐ1306E
R587 68k
C595 47/16
L591 1μH
R591 120 1/4W
C589 0.01
C590 0.01
J590 (2/2)
PHONES
Ð519 1SS133
R533 1M
Q550 2SA1235 F
R534 47k
R580 68 1/2W
R581 2.2k
R531 1k
R583 12k
R585 2.2k
R596 33k
IC580 (2/2) NJM4580L
R556 5.6k
C592 1/50
R584 12k
C594 100p
R582 2.2k
R532 1k
Q552 2SÐ1306E
R586 2.2k
R588 68k
C596 47/16
C597 8200p
C598 8200p
L592 1μH
R589 10k
R590 10k
R592 120 1/4W
SIGNAL: FM/AM/REC/PB

SCHEMATIC DIAGRAM – 8 (MAIN 1 / 2 : HIGH FREQ SECTION : EZ, K)


A MAIN C.B (HIGH FREQ AMP SECTION) <EZ, K>
TO/FROM A MAIN C.B
-VL 10B
HOLD-HF 8B
+VL 9B
+VA 2B
OUT-L 5B
OUT-R 6B
MUTE1 3B
A-GND 11B
DC-DET 12B
U 1B
MUTE 3B
T 4B
OUT-L
OUT-R
9.34
28.96
Q511～518 HPF
Q531～534 HIGH FREQ AMP
C581 0.033
R563 3.3k
R571 8.2k
C505 3.3/50
Q511 2SA1235 F
Q513 2SA1235 F
R517 10k
R523 1k
R525 1k
C519 47/25
D503 1SS133
D505 1SS133
Q531 2SD2478
R535 0.22 1W
C585 0.33/50
R507 100
R511 1k
Q501 2SD1306E MUTE
R565 4.7k
R567 47k
C583 5600p
R505 33k
C513 3300p
R513 3.3k
R509 1.5k
C507 2.2/50
D501 1SS133
Q515 2SC3052 F
Q517 2SC3052 F
R519 100
R521 100
R527 22k
D507 1SS133
C521 220p/50
Q533 2SB1616
R501 47k
Q523 2SC3331T
R539 1.5k
R529 39
R537 0.22 1W
R541 2.7k
C527 120p
(-VP)
Q535 2SC3052 F
R543 100k
W3 DC DET
L551 1µH
R551 10
C531 0.056
R553 10
C533 0.1
C534 0.1
C561 0.1
C562 0.1
R554 10
C532 0.056
(L)
(R)
J501
SPEAKERS HIGH FREQ
SPEAKERS IMP : 6Ω
R518 10k
R524 1k
R526 1k
C520 47/25
Q532 2SD2478
C582 0.033
R564 3.3k
R572 8.2k
C506 3.3/50
R508 100
Q514 2SA1235 F
D504 1SS133
D506 1SS133
R536 0.22 1W
C586 0.33/50
Q512 2SA1235 F
R528 22k
R512 1k
R506 33k
R514 3.3k
R510 1.5k
D508 1SS133
Q534 2SB1616
R544 100k
L552 1µH
R552 10
Q523, 524, 535, 536 OVER LOAD DET
Q502 2SD1306E MUTE
R566 4.7k
R568 47k
C584 5600p
C514 3300p
C508 2.2/50
D502 1SS133
Q518 C3052 F
C522 220p/50
Q524 2SC3331T
R502 47k
R540 1.5k
Q516 2SC3052 F
R520 100
R522 100
R530 39
R538 0.22 1W
R542 2.7k
C528 120p
Q536 2SC3052 F
R598 68 1/4W
R597 68 1/4W
R579 68 1/4W
IC580 (1/2) NJM4580L HIGH FREQ AMP
R595 33k
C593 100p
R555 5.6k
C591 1/50
R587 68k
C595 1/50
L591 1µH
R591 120 1/4W
C589 0.01
C590 0.01
J590 PHONES
D519 1SS133
R581 2.2k
R531 1k
R583 12k
R585 2.2k
Q551 2SD1306E
R596 33k
IC580 (2/2) NJM4580L
R533 1M
Q550 2SA1253 F
R556 5.6k
C592 1/50
R584 12k
C594 100p
C596 1/50
L592 1µH
R592 120 1/4W
C598 8200p
R589 10k
R590 10k
R534 47k
R580 68 1/4W
R582 2.2k
R532 1k
Q552 2SD1306E
R586 2.2k
R588 68k
C597 8200p
SIGNAL : FM/AM/REC/PB

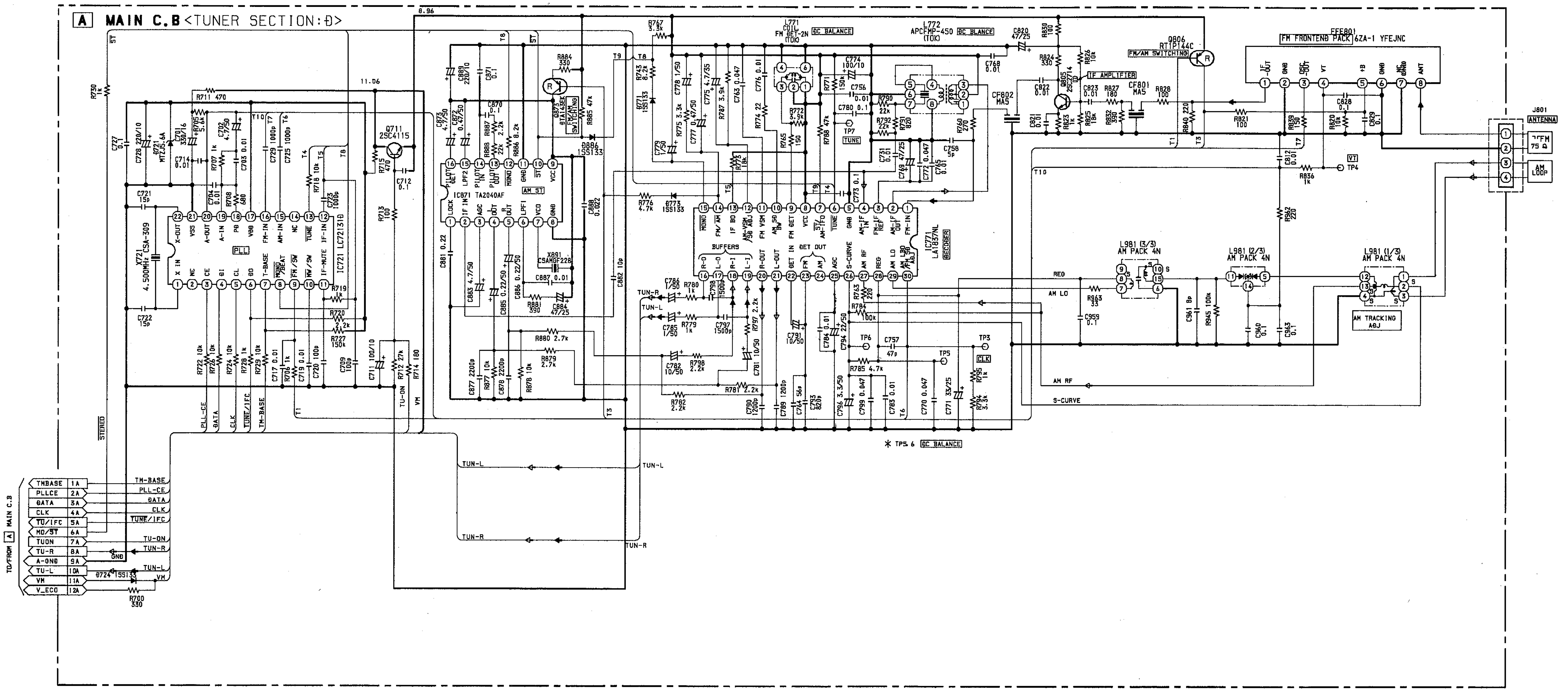
SCHEMATIC DIAGRAM – 9 (MAIN 1 / 2 : TUNER SECTION : U, LH, HR)


A MAIN C.B <TUNER SECTION: U, LH, HR>
TO/FROM A MAIN C.B
TNBASE 1A
PLLCE 2A
DATA 3A
CLK 4A
TU/IFC 5A
MO/ST 6A
TUON 7A
TU-R 8A
A-GND 9A
TU-L 10A
VN 11A
V_ECO 12A
R700 330
D724 1SS133
X721 4.500MHz CSA-309
IC721 LC72131D
PLL
Q711 2SC4115SRS
TUNER SUPPLY REGULATING
IC771 LA1837NL
BUFFERS
DECODER
L771 FM DET-2N (TOK)
DC BALANCE
L772 PCFAYH-450 (TOK)
IF ADJ
IF AMPLIFIER
FM/AM SWITCHING
Q806 RT1P144C
Q805 2SC2714
CF801 SFE10.7MAS
CF802 SFE10.7MAS
FFE801
FM FRONTEND PACK 8ZA-1 YFEUNC
J801 ANTENNA
FM 75Ω
AM LOOP
L981 AM TRACKING ADJ
L981 (3/3) AM PACK 4N
L981 (2/3) AM PACK 4N
L981 (1/3) AM PACK 4N
TP3 CLK
TP4 VT
TP5
TP6
TP7 TUNE
AM RF
S-CURVE
REG
AM LO
TUN-L
TUN-R
* TP5, 6 DC BALANCE

*

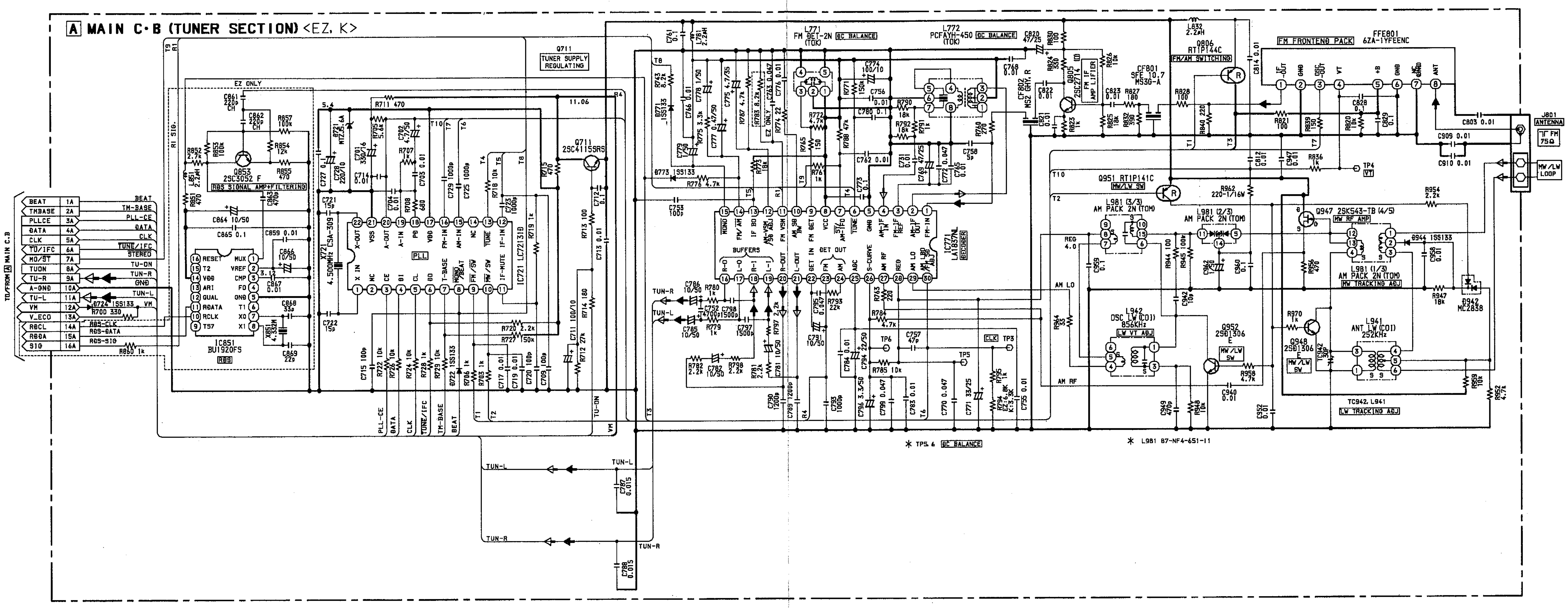
	U, LH	HR
R779, R780	2.7K	1K
C797, C798	2200P	1500P

SCHEMATIC DIAGRAM – 10 (MAIN 1 / 2 : TUNER SECTION : D)



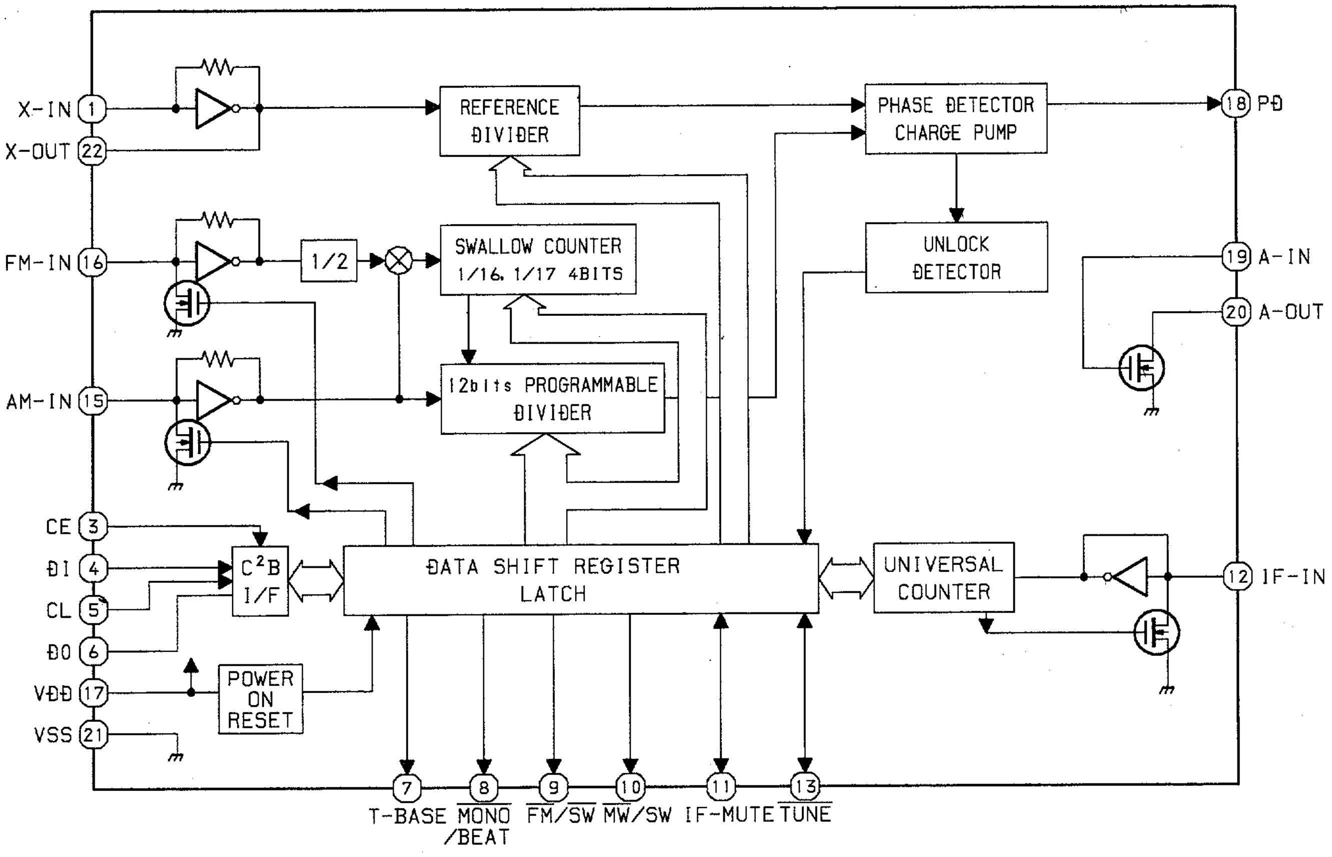
A MAIN C.B <TUNER SECTION:D>
IC721 LC72131D
PLL
X721 4.500MHz CSA-309
Q711 2SC4115
IC871 TA2040AF
AM ST
X891 CSAMGF228
Q873 DTA143EK FM/AM SWITCHING
D886 1SS133
D871 1SS133
D873 1SS133
IC771 LA1837NL
DECODER
BUFFERS
DET OUT
L771 COIL FM DET-2N (TOK) DC BALANCE
L772 APCFMP-450 (TOK) DC BLANCE
Q806 RT1P144C FM/AM SWITCHING
Q805 2SC2714 IF AMPLIFIER
CF801 MA5
CF802 MA5
FFE801 FM FRONTEND PACK 6ZA-1 YFEJNC
J801 ANTENNA
FM 75 Ω
AM LOOP
L981 (3/3) AM PACK 4N
L981 (2/3) AM PACK 4N
L981 (1/3) AM PACK 4N
AM TRACKING ADJ
TP3 CLK
TP4 VT
TP5
TP6
TP7 TUNE
* TP5 6 DC BALANCE
AM RF
AM LO
REG
S-CURVE
TUN-L
TUN-R
STEREO
8.96
11.06
TO/FROM A MAIN C.B
TMBASE 1A
PLLCE 2A
DATA 3A
CLK 4A
TU/IFC 5A
MO/ST 6A
TUON 7A
TU-R 8A
A-GND 9A
TU-L 10A
VM 11A
V_ECO 12A
TM-BASE
PLL-CE
DATA
CLK
TUNE/IFC
TU-ON
TUN-R
TUN-L
VM
GND
D724 1SS133
R700 330

SCHEMATIC DIAGRAM – 11 (MAIN 1 / 2 : TUNER SECTION : EZ, K)

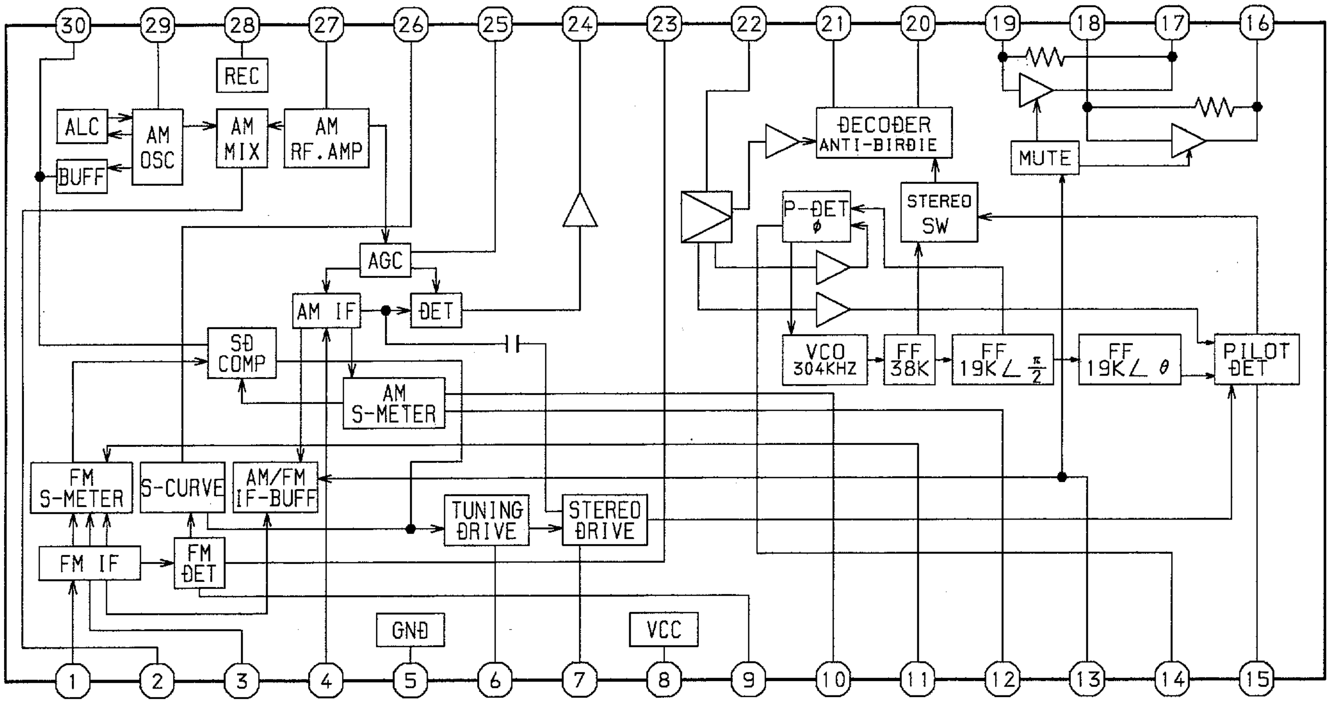

A MAIN C·B (TUNER SECTION) <EZ, K>
TO/FROM A MAIN C.B
BEAT
TMBASE
PLLCE
DATA
CLK
TU/IFC
MO/ST
TUON
TU-R
A-GND
TU-L
VM
V_ECO
RBCL
RBDA
SIG
EZ ONLY
RBS SIGNAL AMP+FILTERING
Q853 2SC3052 F
IC851 BU1920FS
RBS
Q711 2SC4115SRS
Q711 TUNER SUPPLY REGULATING
IC721 LC72131D
PLL
X721 4.500MHz CSA-309
BUFFERS
IC771 LA1837NL
DECODER
L771 FM DET-2N (TOK)
DC BALANCE
L772 PCFAYH-450 (TOK)
DC BALANCE
CF801 SFE 10.7 MS3G-A
Q805 2SC2714 FM IF AMP LIFTER
Q806 RT1P144C
FM/AM SWITCHING
FM FRONTEND PACK
FFE801 6ZA-1YFEENC
J801 ANTENNA
FM 75Ω
MW/LW LOOP
Q951 RT1P141C
MW/LW SW
L981 (3/3) AM PACK 2N (TOM)
L981 (2/3) AM PACK 2N (TOM)
L981 (1/3) AM PACK 2N (TOM)
MW TRACKING ADJ
Q947 2SK543-TB (4/5)
MW RF AMP
D944 1SS133
D942 MC2838
L942 OSC LW (COI) 856KHz
LW VT ADJ
Q952 2SD1306
MW/LW SW
Q948 2SD1306
L941 ANT LW (COI) 252KHz
TC942, L941
LW TRACKING ADJ
TUN-L
TUN-R
C787 0.015
C788 0.015
✻ TPS, 6 DC BALANCE
✻ L981 87-NF4-651-11

IC BLOCK DIAGRAM – 2

IC, LC72131D


X-IN 1
X-OUT 22
FM-IN 16
AM-IN 15
CE 3
DI 4
CL 5
DO 6
VDD 17
VSS 21
REFERENCE DIVIDER
1/2
SWALLOW COUNTER 1/16, 1/17 4BITS
12bits PROGRAMMABLE DIVIDER
PHASE DETECTOR CHARGE PUMP
UNLOCK DETECTOR
C²B I/F
DATA SHIFT REGISTER LATCH
UNIVERSAL COUNTER
POWER ON RESET
18 PD
19 A-IN
20 A-OUT
12 IF-IN
7 T-BASE
8 MONO/BEAT
9 FM/SW
10 MW/SW
11 IF-MUTE
13 TUNE

IC, LA1837NL


30
29
28
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26
25
24
23
22
21
20
19
18
17
16
REC
ALC
AM OSC
AM MIX
AM RF.AMP
BUFF
AGC
AM IF
DET
SD COMP
AM S-METER
FM S-METER
S-CURVE
AM/FM IF-BUFF
TUNING DRIVE
STEREO DRIVE
FM IF
FM DET
GND
VCC
DECODER ANTI-BIRDIE
P-DET φ
STEREO SW
MUTE
VCO 304KHZ
FF 38K
FF 19K∠π/2
FF 19K∠θ
PILOT DET
1
2
3
4
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6
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8
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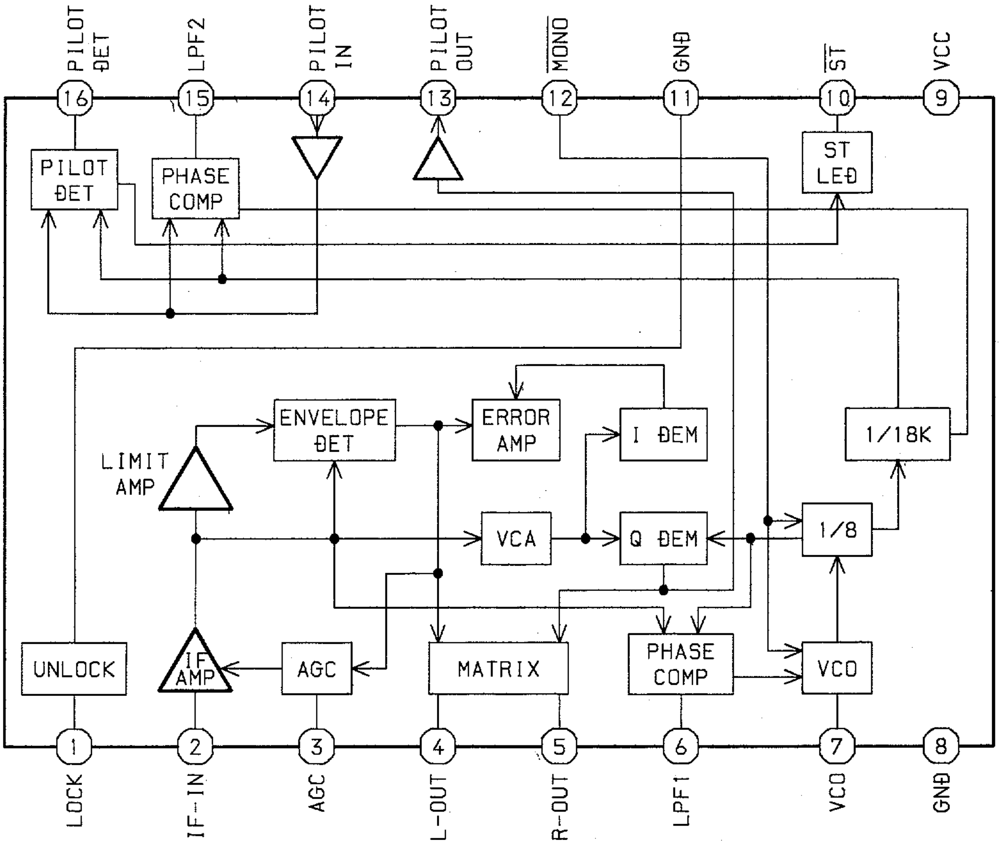
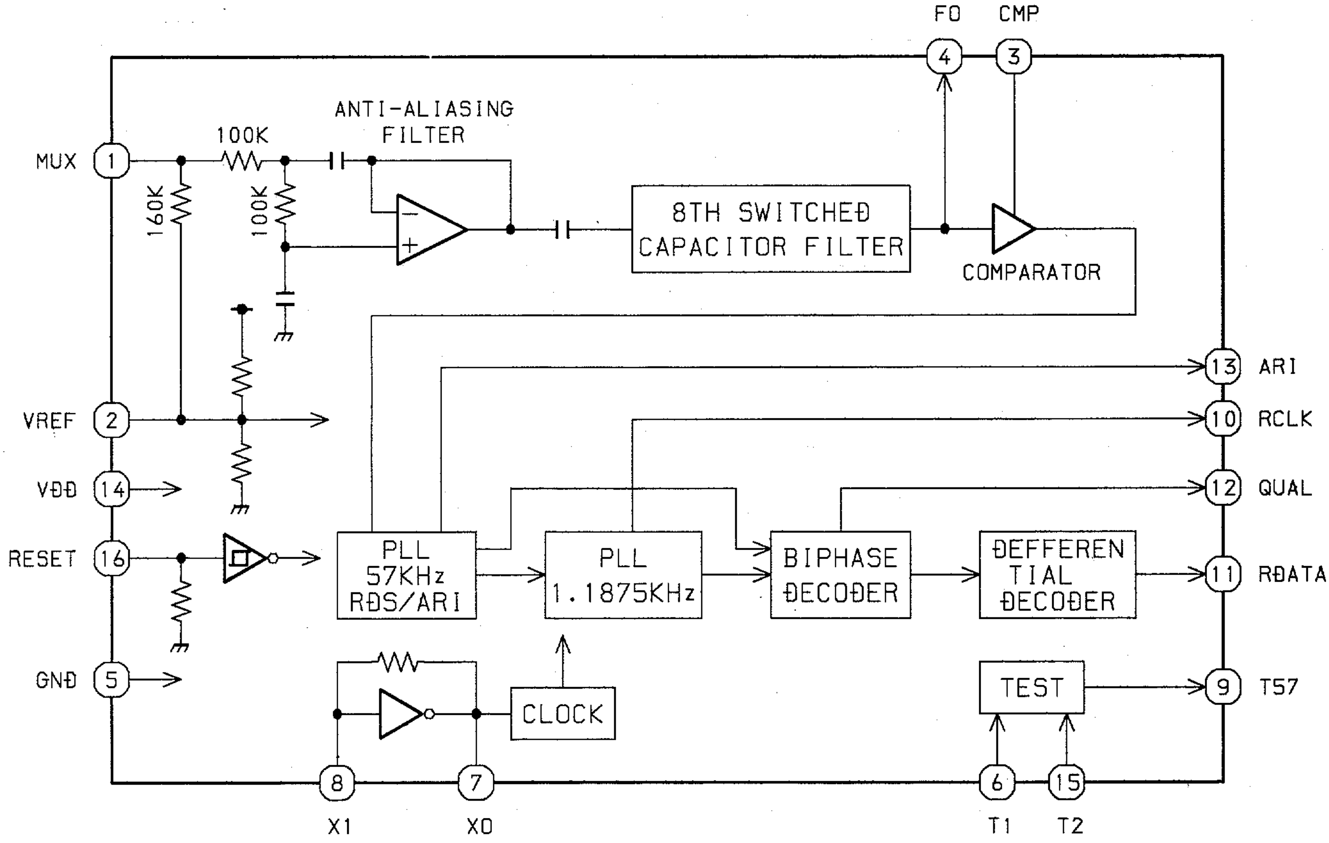
10
11
12
13
14
15

IC, TA2040AF


PILOT DET
LPF2
PILOT IN
PILOT OUT
MONO
GND
ST
VCC
16
15
14
13
12
11
10
9
PILOT DET
PHASE COMP
ST LED
ENVELOPE DET
ERROR AMP
I DEM
1/18K
LIMIT AMP
VCA
Q DEM
1/8
UNLOCK
IF AMP
AGC
MATRIX
PHASE COMP
VCO
1
2
3
4
5
6
7
8
LOCK
IF-IN
AGC
L-OUT
R-OUT
LPF1
VCO
GND

IC, BU1920FS


FO
CMP
4
3
MUX
1
100K
ANTI-ALIASING FILTER
160K
100K
8TH SWITCHED CAPACITOR FILTER
COMPARATOR
13
ARI
VREF
2
10
RCLK
VDD
14
12
QUAL
RESET
16
PLL 57KHz RDS/ARI
PLL 1.1875KHz
BIPHASE DECODER
DEFFERENTIAL DECODER
11
RDATA
GND
5
CLOCK
TEST
9
T57
8
7
6
15
X1
XO
T1
T2

IC DESCRIPTION (U, LH, HR, EZ, K)

IC, M38B57MCH-P226FP

Pin No.	Pin Name	I/O	Description
1	I-JOG	I	JOG analog input. (Not used)
2	I-RDS-SIG	I	RDS tuning level A/D input.
3	I-HOLD	I	System hold input A/D input.
4	I-SW-TP	I	Cassette detect switch A/D input.
5	I-KEY2	I	Key 2 A/D input.
6	I-KEY1	I	Key 1 A/D input.
7	O-SHIFT	O	Micon clock shift output.
8	O-LED-AUX	O	Aux function LED ON/OFF output.
9	I-RMC	I	Remote control data input.
10	I-RESET	I	Micon reset input.
11	O-LED-TU	O	Tuner function LED ON /OFF output.
12	O-TU-ON	O	Tuner mode on output.
13	VSS	I	Ground.
14	XIN	I	4.19MHz ceralock.
15	XOUT	O	4.19MHz ceralock.
16	VDD	I	Power supply.
17	O-SOL	O	Deck solenoid ON/OFF output.
18	O-REC/PB	O	Deck Record/Playback select output.
19	O-QSND	O	Qsound chip enable output.(NC)
20	O-BIAS	O	Record 85kHz oscillator ON/OFF output.
21	O-MUTE	O	Mute output.
22	I-WRQ/RDCL	I	CD WRQ input / RDS clock input.
23	O-POWER	O	Power ON/OFF control output.
24	O-LED-TP	O	Tape function LED ON/OFF output.
25	O-DATA	O	Common serial data output.
26	O-CLK	O	Common serial clock output.
27	O-KSCAN	O	Key-scan output.
28	VEE	I	–VFL.
29	O-PLL-CE	O	PLL chip enable output.
30	O-MOTOR	O	Deck motor ON/OFF control output.
31	O-RECMUTE	O	Record mute output.
32 ~ 42	O-G1 ~ O-G11	O	FL grid G1 ~ G11 output.
43 ~ 56	O-P1 ~ O-P14	O	FL port P1 ~ P14 output.
57	O-P15/I-OIRT	O/I	FL port P15 output / OIRT diode detect input.
58	O-P16/I-RDS	O/I	FL port P16 output / RDS diode detect input.
59	O-P17/I-AMST	O/I	FL port P17 output / AM stereo diode detect input.
60	O-P18/I-LW	O/I	FL port P18 output / LW diode detect input.
61	O-P19/I-SW	O/I	FL port P19 output / SW diode detect input.
62	O-P20/I-AM10K	O/I	FL port P20 output / AM 10k setting diode detect input.
63	O-P21/I-AS	O/I	FL port P21 output / Auto stop signal input.
64	O-P22/I-STOP	O/I	FL port P22 output / Deck stop signal input.

Pin No.	Pin Name	I/O	Description
65	MD	O	MD function LED ON/$\overline{\text{OFF}}$ output.
66	O-$\overline{\text{ECO}}$	O	Economical mode.
67	O-LED-CD	O	CD function LED ON/$\overline{\text{OFF}}$ output.
68	I-TM-BASE	I	Time base clock (8Hz) input.
69	O-$\overline{\text{CD-ON}}$	O	CD $\overline{\text{ON}}$/OFF control output.
70	O-CQCK	O	CD clock output.
71	O-RWC/I-RDDA	O/I	CD control data output / RDS data input.
72	I-$\overline{\text{TU}}$/IFC/SQOUT	I	$\overline{\text{Tuner}}$ TUNE, IFC input / CD SQOUT input.
73	AVSS	I	Analogue ground.
74	VREF	I	Reference voltage input.
75	I-$\overline{\text{ST}}$/I-DRF	I	Tuner stereo input / CD DRF input.
76	O-CD-OPEN	O	CD tray open output.
77	O-CD-CLOSE	O	CD tray close output.
78	I-CDTSW	I	CD tray switch A/D input.
79	O-COIN	O	Command to CD DSP output.
80	I-VOL	I	Rotary encoder volume A/D input.

IC, LA9241ML

Pin No.	Pin Name	I/O	Description
1	FIN2	I	Connects to the pickup's photo diode; adding this pin to pin FIN1 generates RF signal, and subtracting it generates FE signal.
2	FIN1	I	Connects to the pickup's photo diode.
3	E	I	Connects to the pickup's photo diode; subtracting this pin from pin F generates TE signal.
4	F	I	Connects to the pickup's photo diode.
5	TB	I	Input for DC component of TE signal.
6	TE–	I	Connects to the resistor between this pin and TE pin for setting the gain of TE signal.
7	TE	O	Output for TE signal.
8	TESI	I	Input for TES (Track Error Sense) comparator, TE signal is band-passed and inputted.
9	SCI	I	Input for shock detection.
10	TH	I	For setting tracking gain time constant.
11	TA	O	TA amplifier output pin.
12	TD–	I	For constructing tracking phase compensation constant between TD and VR pins.
13	TD	O	For setting tracking phase compensation.
14	JP	I	For setting the amplifier of tracking jump signal (kick pulse).
15	TO	O	Output for tracking control signal.
16	FD	O	Output for focusing control signal.
17	FD–	I	For constructing focusing phase compensation constant between FD and FA pins.
18	FA	O	For constructing focusing phase compensation constant between FD– and FA– pins.
19	FA–	I	For constructing focusing phase compensation constant between FA and FE pins.
20	FE	O	Output for FE signal.
21	FE–	I	Connects to the gain-setting resistor of FE signal between this pin and FE pin.
22	A-GND	–	GND for analog signals.
23	NC	–	Not connected.
24	SP	O	Single end output of CV+ and CV– pin input signal.
25	SPG	I	Connects to the gain-setting resistor during spindle 12cm mode.
26	SP–	I	Connects to spindle phase compensation constant together with SPD pin.
27	SPD	O	Output for spindle control signal.
28	SLEQ	I	Connects to sled phase compensation constant.
29	SLD	O	Output for sled control signal.
30	SL–	I	Input for sled-sending signal from microcontroller.
31	SL+	I	Input for sled-sending signal.
32	JP–	I	Input for tracking-jump signal from DSP.
33	JP+		
34	TGL	I	Input for tracking gain control signal from DSP; gain is low if TGL = "H".
35	TOFF	I	Input for tracking off control signal from DSP; off if TOFF = "H".
36	TES	O	Outputs TES signal to DSP.
37	HFL	O	HIGH FREQUENCY LEVEL; used to determine whether the main beam is on a pit or on a mirror.
38	SLOF	I	Input for sled servo off control.

Pin No.	Pin Name	I/O	Description
39	CV–	I	Input for CLV error signal from DSP.
40	CV+		
41	RFSM	O	Output for RF.
42	RFS–	O	For setting RF gain and 3T compensation constant together with RFSM.
43	SLC	O	SLICE LEVEL CONTROL; output for controlling the data slice level of DSP with RF waveform.
44	SLI	I	Input for controlling the data slice level of DSP.
45	D-GND	–	GND for digital system.
46	FSC	O	Output pin for focus search smoothing capacitor.
47	TBC	I	(Tracking Balance Control) EF balance variable range setting pin.
48	NC	–	Not connected.
49	DEF	O	Output for disk defect detection.
50	CLK	I	Standard clock input; DSP's 4.23MHz is inputted.
51	CL	I	Clock input for microcontroller command.
52	DAT	I	Data input for microcontroller command.
53	CE	I	Chip-enable input for microcontroller command.
54	DRF	O	Detect RF; output for RF level detection.
55	FSS	I	(Focus Search Mode) = search/+search against reference voltage switching pin. (Not used)
56	VCC2	–	VCC pin for servo and digital systems.
57	REFI	I	For connecting pass capacitor to reference voltage.
58	VR	O	Reference voltage output.
59	LF2	–	For setting disk defect-detection time constant.
60	PHI	–	Connects to capacitor for RF signal peak hold.
61	BHI	–	Connects to capacitor for RF signal bottom hold.
62	LDD	O	Output for APC circuit.
63	LDS	I	Input for APC circuit.
64	VCC1	–	VCC pin for RF system.

IC, LC78622ED

Pin No.	Pin Name	I/O	Description
1	DEFI	I	Defect detection signal (DEF) input.
2	TAI	I	Test input. A pull-down resistor is built in. Must be connected to 0V.
3	PDO	O	External VCO control phase comparator output.
4	VVSS	–	Internal VCO ground. Must be connected to 0V.
5	ISET	O	PDO output current adjustment resistor connection.
6	VVDD	–	Internal VCO power supply.
7	FR	–	VCO frequency range adjustment.
8	VSS	–	Digital system ground. Must be connected to 0V.
9	EFMO	O	Slice level control; EFM signal output.
10	EFMIN	I	Slice level control; EFM signal input.
11	T2	I	Test input. A pull-down resistor is built in. Must be connected to 0V.
12	CLV+	O	Disc motor control output. Three-value ouput is also possible when specified by microprocessor command.
13	CLV–		
14	V/$\overline{P}$	O	Rough servo/phase control automatic switching monitor output. Outputs a high level during rough servo and a low level during phase control.
15	HFL	I	Track detection signal input. This is a Schmitt input.
16	TES	I	Tracking error signal input. This is a Schmitt input.
17	TOFF	O	Tracking off output.
18	TGL	O	Tracking gain switching output. Increase the gain when low.
19	JP+	O	Track jump output. Three-value output is also possible when specified by microprocessor command.
20	JP–		
21	PCK	O	EFM data playback clock monitor. Outputs 4.3218 MHz when the phase is locked. (Not used)
22	FSEQ	O	Synchronization signal detection ouput. Outputs a high level when the synchronization signal detected from the EFM signal and the internally generated synchronization signal agree. (Not used)
23	VDD	–	Digital system power supply.
24	SL+	O	Serial data command sled signal output terminal from microprocessor.
25	SL–		
26	NC	–	Not used.
27	PU IN	I	CD pickup inside limit switch.
28	NC	–	Not used.
29	EMPH	O	De-emphasis monitor pin. A high level indicates playback of a de-emphasis disk. (Not used)
30	C2F	O	C2 flag output. (Not used)
31	DOUT	O	Digital output (EIAJ format). (Not used)
32	T3	I	Test input. A pull-down resistor is built in. Must be connected to 0V.
33	T4		
34	NC	–	Unused. Must be left open.
35	MUTEL	O	Left channel one-bit D/A converter mute output.
36	LVDD	–	Left channel one-bit D/A converter power supply.

Pin No.	Pin Name	I/O	Description
37	LCHO	O	Left channel one-bit D/A converter output.
38	LVSS	–	Left channel one-bit D/A converter ground. Must be connected to 0V.
39	RVSS	–	Right channel one-bit D/A converter ground. Must be connected to 0V.
40	RCHO	O	Right channel one-bit D/A converter output.
41	RVDD	–	Right channel one-bit D/A converter power supply.
42	MUTER	O	Right channel one-bit D/A converter mute ouput.
43	XVDD	–	Crystal oscillator power supply.
44	XOUT	O	Connections for a 16.934MHz crystal oscillator element.
45	XIN	I	
46	XVSS	–	Crystal oscillator ground. Must be connected to 0V.
47	SBSY	O	Subcode block synchronization signal output. (Not used)
48	EFLG	O	C1, C2 single and double error correction monitor pin. (Not used)
49	PW	O	Subcode P, Q, R, S, T, U, V and W output. (Not used)
50	SFSY	O	Subcode frame synchronization signal output. This signal falls when the subcode are in the standby state. (Not used)
51	SBCK	I	Subcode readout clock input. This is a Schmitt input. (Must be connected to 0V when unused)
52	FSX	O	Output for the 7.35 kHz synchronization signal divided from the crystal oscillator. (Not used)
53	WRQ	O	Subcode Q output standby output.
54	RWC	I	Readwrite control input. This is a Schmitt input.
55	SQOUT	O	Subcode Q output.
56	COIN	I	Command input from the control microprocessor.
57	$\overline{\text{CQCK}}$	I	Input for both the command input acquisition clock and the SQOUT pin subcode readout clock input. This is a Schmitt input.
58	$\overline{\text{RES}}$	I	Chip reset pin. This pin must be set low briefly after power is first applied.
59	T11	O	Test output. Leave open. (Normally outputs a low level). (Not used)
60	16M	O	16.9344 MHz output. (Not used)
61	4.2M	O	4.2336 MHz output.
62	T5	I	Test input. A pull-down resistor is built in. Must be connected to 0V.
63	$\overline{\text{CS}}$	I	Chip select input. A pull-down resistor is built in. Must be connected to 0V if not controlled.
64	T1	I	Test input. No pull-down resistor. Must be connected to 0V.

IC DESCRIPTION (D)

IC, M38B57MCH-P226FP

端子番号	端子名称	I/O	機能説明
1	I-JOG	I	JOGアナログ入力。（未使用。）
2	I-RDS-SIG	I	RDSチューニングレベルA/D入力。
3	I-$\overline{\text{HOLD}}$	I	システムホールド入力A/D入力。
4	I-SW-TP	I	カセット検出スイッチA/D入力。
5	I-KEY2	I	キー2A/D入力。
6	I-KEY1	I	キー1A/D入力。
7	O-$\overline{\text{SHIFT}}$	O	マイコンクロックシフト出力。
8	O-LED-AUX	O	AUXファンクションLED ON/$\overline{\text{OFF}}$出力。
9	I-RMC	I	リモコンデータ入力。
10	I-$\overline{\text{RESET}}$	I	マイコンリセット入力。
11	O-LED-TU	O	チューナーファンクションLED ON/$\overline{\text{OFF}}$出力。
12	O-$\overline{\text{TU-ON}}$	O	チューナーモードオン出力。
13	VSS	I	GND。
14	XIN	I	4.19MHzセラロック。
15	XOUT	O	4.19MHzセラロック。
16	VDD	I	電源。
17	O-$\overline{\text{SOL}}$	O	デッキソレノイドON/OFF出力。
18	O-$\overline{\text{REC}}$-PB	O	デッキ録 $\overline{\text{REC}}$/PB 生選択出力。
19	O-QSND	O	Qサウンドチップイネーブル出力（未接続)。
20	O-BIAS	O	録音85kHz発振子$\overline{\text{ON}}$/OFF出力。
21	O-MUTE	O	ミュート出力。
22	I-WRQ/RDCL	I	CD WRQ入力・RDSクロック入力。
23	O-$\overline{\text{POWER}}$	O	パワー$\overline{\text{ON}}$/OFFコントロール出力。
24	O-LED-TP	O	テープファンクションLED ON/$\overline{\text{OFF}}$出力。
25	O-DATA	O	コモンシリアルデータ出力。
26	O-CLK	O	コモンシリアルクロック出力。
27	O-$\overline{\text{KSCAN}}$	O	キースキャン出力。
28	VEE	I	-VFL。
29	O-PLL-CE	O	PLLチップイネーブル出力。
30	O-MOTOR	O	デッキモーターON/$\overline{\text{OFF}}$コントロール出力。
31	O-$\overline{\text{RECMUTE}}$	O	録音ミュート出力。
32~42	O-G1~O-G11	O	FLグリッドG1-G11出力。
43~56	O-P1~O-P14	O	FLポートP1-P14出力。
57	O-P15/I-OIRT	O/I	FLポートP1-P15出力・OIRTダイオード検出入力。
58	O-P16/I-RDS	O/I	FLポートP16出力・RDSダイオード検出入力。
59	O-P17/I-AMST	O/I	FLポートP17出力・AMステレオダイオード検出入力。
60	O-P18/I-LW	O/I	FLポートP18出力・LWダイオード検出入力。
61	O-P19/I-SW	O/I	FLポートP19出力・SWダイオード検出入力。

端子番号	端子名称	I/O	機能説明
62	O-P20/I-AM10K	O/I	FLポートP20出力・AM 10k設定ダイオード検出入力。
63	O-P21/1-AS	O/I	FLポートP21出力・オートストップ信号入力。
64	O-P22/I-STOP	O/I	FLポートP22出力・デッキストップ信号入力。
65	MD	O	MDファンクションLED ON/$\overline{\text{OFF}}$出力。
66	O-$\overline{\text{ECO}}$	O	エコノミーモード。
67	O-LED-CD	O	CDファンクションLED ON/$\overline{\text{OFF}}$出力。
68	I-TM-BASE	I	タイムベースクロック（8Hz）入力。
69	O-$\overline{\text{CD-ON}}$	O	CD $\overline{\text{ON}}$/OFFコントロール出力。
70	O-CDCK	O	CDクロック出力。
71	O-RWC/I-RDDA	O/I	CDコントロールデータ出力・RD5データ入力。
72	I-$\overline{\text{TU}}$/IFC/SQOUT	I	チューナー$\overline{\text{TUNE}}$, IPC入力・CD SQOUT入力。
73	AVSS	I	アナログGND。
74	VREF	I	基準電圧入力。
75	I-$\overline{\text{ST}}$/I-DRF	I	チューナーステレオ入力・CD DRF入力。
76	O-CD-OPEN	O	CDトレイオープン出力。
77	O-CD-CLOSE	O	CDトレイクローズ出力。
78	I-CDTSW	I	CDトレイスイッチA/D入力。
79	O-COIN	O	CD DSP出力へコマンド。
80	I-VOL	I	ロータリーエンコーダーボリュームA/D入力。

IC, LA9241ML

端子番号	端子名称	I/O	機能説明
1	FIN2	I	ピックアップのフォトダイオード接続用ピン。FIN1ピンとの加算でRF信号を生成し、減算でFE信号を生成する。
2	FIN1	I	ピックアップのフォトダイオード接続用ピン。
3	E	I	ピックアップのフォトダイオード接続用ピン。Fピンとの減算でTE信号を生成する。
4	F	I	ピックアップのフォトダイオード接続用ピン。
5	TB	I	TE信号のDC成分入力用ピン。
6	TE-	O	TE信号のゲイン設定用抵抗をTEピン間に接続するピン。
7	TE	O	TE信号出力ピン。
8	TESI	I	TES（TRACK ERROR SENSE）コンパレータ入力ピン。TE信号をバンドパスし、入力する。
9	SCI	I	ショック検出用入力ピン。
10	TH	I	トラッキングゲイン時定数設定用ピン。
11	TA	O	TAアンプ出力ピン。
12	TD-	I	トラッキング位相補償定数をTD、VRピン間で構成するためのピン。
13	TD	O	トラッキング位相補償定数用ピン。
14	JP	I	トラッキングジャンプ信号（キックパルス）振幅設定用ピン。
15	TO	O	トラッキング制御信号出力ピン。
16	FD	O	フォーカシング制御信号出力ピン。
17	FD –	I	フォーカシング位相補償定数をFD、FAピン間で構成するためのピン。
18	FA	O	フォーカシング位相補償定数をFD－、FA－ピン間で構成するためのピン。
19	FA –	I	フォーカシング位相補償定数をFA、FEピン間で構成するためのピン。
20	FE	O	FE信号の出力ピン。
21	FE –	I	FE信号のゲイン設定用抵抗をTEピン間に接続するピン。
22	AGND	–	アナログ信号用GND。
23	NC	–	未使用端子。
24	SP	I	スピンドルアンプ入力。
25	SPG	I	スピンドル12cmモード時ゲイン設定用抵抗接続ピン。
26	SP –	I	SPDピンとともにスピンドル位相補償定数接続用ピン。
27	SPD	O	スピンドル制御信号出力ピン。
28	SLEQ	I	スレッド位相補償定数接続用ピン。
29	SLD	O	スレッド制御信号出力ピン。
30	SL –	I	マイコンからのスレッド送り信号入力ピン。
31	SL +		
32	JP –	I	DSPからのトラッキングジャンプ信号入力ピン。
33	JP +		
34	TGL	I	DSPからのトラッキングゲインコントロール信号入力ピン。TGL="H"でゲインロー。
35	TOFF	I	DSPからのトラッキングオフコントロール信号入力ピン。TOFF="H"でオフ。
36	TES	O	TES信号をDSPへ出力するピン。

端子番号	端子名称	I/O	機能説明
37	HFL	O	(HIGH FREQUENCY LEVEL)は、メインビームの位置がビット上か、ミラー上かの判断に利用される。
38	SLOF	I	スレッドサーボオフコントロール入力ピン。
39	CLV−	O	DSPからのCLVエラー信号入力用ピン。
40	CLV +		
41	RFSM	O	RF出力ピン。
42	RFS −	O	RFSMピンとともにRFのゲイン設定及びEFM信号の3T補償定数設定用ピン。
43	SLC −	O	(SLICE LEVEL CONTOROL)は、RF波形のDSPによるデータスライスのレベル を制御する出力ピン。
44	SLI	I	DSPによるデータスライスのレベルを制御するための入力ピン。
45	DGND	−	デジタル系のGNDピン。
46	FSC	O	フォーカスサーチスムージングコンデンサ用出力ピン。
47	TBC	I	(Tracking Balance Control)EFバランス可変範囲用設定ピン。
48	NC	−	未使用端子。
49	DEF	O	ディスクのディフェクト検出出力ピン。
50	CLK	I	基準クロック入力ピン。DSPの4.23MHzが入力される。
51	CL	I	マイコンコマンドクロック入力ピン。
52	DAT	I	マイコンコマンドデータ入力ピン。
53	CE	I	マイコンコマンドチップイネーブル入力ピン。
54	DRF	O	(DETECT RF)RFレベル検出出力。
55	FSS (NC)	I	未使用端子。
56	VCC2	−	サーボ系。デジタル系用VCCピン。
57	REFI	−	基準電圧用パスコン接続用ピン。
58	VR	O	基準電圧出力ピン。
59	LF2	−	ディスクのディフェクト検出時定数設定用ピン。
60	PH1	−	RF信号のピークホールド用コンデンサ接続用ピン。
61	BH1	−	RF信号のボトムホールド用コンデンサ接続用ピン。
62	LDD	O	APC回路出力ピン。
63	LDS	I	APC回路入力ピン。
64	VCC1	−	RF系VCCピン。

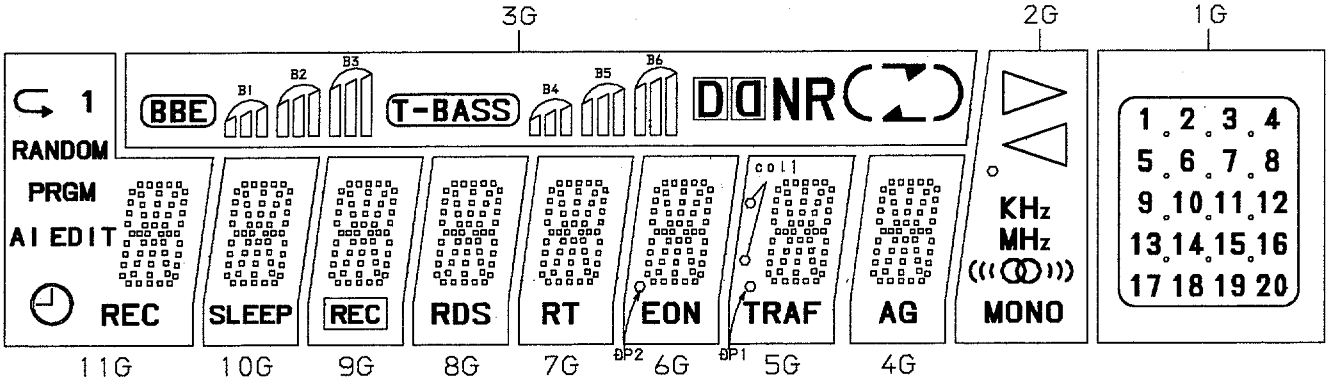
IC, LC78622ED

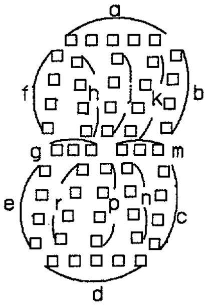
端子番号	端子名称	I/O	機能説明
1	DEFI	I	ディフェクト検出信号（DEF）入力端子。（未使用時、0Vに接続すること）
2	TAI	I	PLL 用テスト用入力端子。プルダウン抵抗内蔵。必ず0Vに接続すること。
3	PDO	O	PLL 用外部VCO制御用位相比較出力端子。
4	VVSS	–	PLL 用内蔵VCO用接地端子。必ず0Vに接続すること。
5	ISET	I	PLL 用PDO出力の電流調整用抵抗接続端子。
6	VVDD	–	PLL 用内蔵VCO用電源端子。
7	FR	I	PLL 用VCO周波数レンジ調整用。
8	VSS	–	デジタル系接地端子。必ず0Vに接続すること。
9	EFMO	O	スライスレベルコントロール用 EFM信号出力端子。
10	EFMIN	I	スライスレベルコントロール用 EFM信号入力端子。
11	TEST2	I	テスト用入力端子。プルダウン抵抗内蔵。必ず0Vに接続すること。
12	CLV+	O	ディスクモータコントロール用出力。3値出力。
13	CLV–		
14	V/$\overline{\text{P}}$	O	ラフサーボ／位相制御の自動切り替えモニタ出力端子。"H "でラフサーボ、" L" で位相サーボ。
15	HFL	I	トラック検出信号入力端子。シュミット入力。
16	TES	I	トラッキング誤差信号入力端子。シュミット入力。
17	TOFF	O	トラッキング OFF 出力端子。
18	TGL	O	トラッキングゲイン切り替え用出力端子。" L "でゲインを上げる。
19	JP+	O	トラックジャンプコントロール用出力。3値出力。
20	JP –		
21	PCK	O	EFNデータ再生用クロックモニタ端子。位相ロック時、4.3218MHz。（未使用）
22	FSEQ	O	同期信号検出出力端子。EFM信号から検出した同期信号と内部生成の同期信号が一致した時に、" Hi "。（未使用）
23	VDD	–	デジタル系電源端子。
24	SL+	O	マイコンからのシリアルデータコマンドスレッド送り信号出力ピン。
25	SL –		
26	NC	–	未使用。
27	PUIN	I	CDピックアップインサイドリミットスイッチ。
28	NC	–	未使用。
29	EMPH	O	ディエンファシスモニタ端子。" H "の時ディエンファシス・ディスク再生中。（未使用）
30	C2F	O	C2フラグ出力端子。（未使用）
31	DOUT	O	デジタルOUT出力端子。（EIAJフォーマット）
32,33	TEST3,TEST4	I	テスト用入力端子。プルダウン抵抗内蔵。必ず0Vに接続すること。
34	NC	–	未使用端子。オープンで使用すること。（未使用）
35	MUTEL	O	Lチャネル1ビットDAC。Lチャネル用ミュート出力端子。
36	LVDD	–	Lチャネル1ビットDAC。Lチャネル用電源端子。
37	LCHO	O	Lチャネル1ビットDAC。Lチャネル出力端子。
38	LVSS	–	Lチャネル1ビットDAC。Lチャネル用接地端子。必ず0Vに接続すること。

端子番号	端子名称	I/O	機能説明
39	RVSS	–	Rチャンネル1ビットDAC。Rチャンネル用接地端子。必ず0Vに接続すること。
40	RCHO	O	Rチャンネル1ビットDAC。Rチャンネル出力端子。
41	RVDD	–	Rチャンネル1ビットDAC。Rチャンネル用電源端子。
42	MUTER	O	Rチャンネル1ビットDAC。Rチャンネル用ミュート出力端子。
43	XVDD	–	水晶発振用電源端子。
44	XOUT	O	16.9344MHz水晶振動子の接続端子。
45	XIN	I	
46	XVSS	–	水晶発振用接地端子。必ず0Vに接続すること。
47	SBSY	O	サブコードブロックの同期信号出力端子。（未使用）
48	EFLG	O	C1, C2, 1重、2重の訂正モニタ端子。（未使用）
49	PW	O	サブコードP、Q、R、T、U、Wの出力端子。（未使用）
50	SFSY	O	サブコードフレーム同期信号出力端子。サブコードがスタンバイした時、立ち下がる。（未使用）
51	SBCK	I	サブコード読みだしクロック入力端子。シュミット入力。
52	FSX	O	水晶発振から分周した7.35kHz同期信号出力端子。（未使用）
53	WRQ	O	サブコードQ出力スタンバイ出力端子。
54	RWC	I	リード／ライト制御入力端子。シュミット入力。
55	SQOUT	O	サブコードQ出力端子。
56	COIN	I	マイコンからのコマンド入力端子。
57	$\overline{\text{CQCK}}$	I	コマンド入力取り込みクロックまたはSQOUTからサブコード取り出しクロック入力端子。シュミット入力。
58	$\overline{\text{RES}}$	I	LC78622Eリセット入力端子。電源投入時に、一旦"L"にする。
59	TST11	O	テスト用出力端子。オープン（通常"L"出力）で使用すること。（未使用）
60	16M	O	16.9344MHz出力端子。（未使用）
61	4.2M	O	4.2336MHz出力端子。
62	TESTS	I	テスト用入力端子。プルダウン抵抗内蔵。必ず0Vに接続すること。
63	$\overline{\text{CS}}$	I	チップセレクト入力端子。プルダウン抵抗内蔵。必ず0Vに接続すること。
64	TEST1	I	テスト用入力端子。プルダウン抵抗はない。必ず0Vに接続すること。

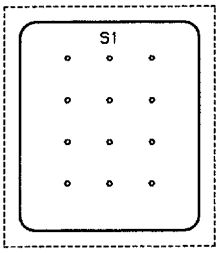
FL (11BT-171GK) GRID ASSIGNMENT & ANODE CONNECTION

GRID ASSIGNMENT


3G
2G
1G
1
RANDOM
PRGM
AI EDIT
REC
BBE
B1
B2
B3
T-BASS
B4
B5
B6
NR
col1
KHz
MHz
MONO
1 2 3 4
5 6 7 8
9 10 11 12
13 14 15 16
17 18 19 20
SLEEP
REC
RDS
RT
EON
TRAF
AG
11G
10G
9G
8G
7G
DP2
6G
DP1
5G
4G


a
f
h
j
k
b
g
m
e
r
p
n
c
d

(11G-4G)



(1G)

ANODE CONNECTION

	11G	10G	9G	8G	7G	6G	5G	4G	3G	2G	1G
P1	**REC**	**SLEEP**	**REC**	**RDS**	**RT**	**EON**	**TRAF**	**AG**	**BBE**	**MONO**	**20**
P2	d	d	d	d	d	d	d	d	B1	((⊙))	**19**
P3	n	n	n	n	n	n	n	n	B2	**MHz**	**18**
P4	p	p	p	p	p	p	p	p	B3	**KHz**	**17**
P5	r	r	r	r	r	r	r	r	**T-BASS**	⬡	**16**
P6	e	e	e	e	e	e	e	e	B4	▷	**15**
P7	c	c	c	c	c	c	c	c	B5	◁	**14**
P8	g	g	g	g	g	g	g	g	B6	—	**13**
P9	m	m	m	m	m	m	m	m	**DD NR**	—	**12**
P10	f	f	f	f	f	f	f	f	(	—	**11**
P11	b	b	b	b	b	b	b	b	Z	—	**10**
P12	k	k	k	k	k	k	k	k	)	—	**9**
P13	j	j	j	j	j	j	j	j	—	—	**8**
P14	h	h	h	h	h	h	h	h	—	—	**7**
P15	a	a	a	a	a	a	a	a	—	—	**6**
P16	**RANDOM**	—	—	—	—	—	col UP	—	—	—	**5**
P17	🕘	—	—	—	—	—	col DOWN	—	—	—	**4**
P18	**1**	—	—	—	—	DP2	DP1	—	—	—	**3**
P19	**PRGM**	—	—	—	—	—	—	—	—	—	**2**
P20	**A1**	—	—	—	—	—	—	—	—	—	**1**
P21	**EDIT**	—	—	—	—	—	—	—	—	—	S1
P22	↪	—	—	—	—	—	—	—	—	—	—

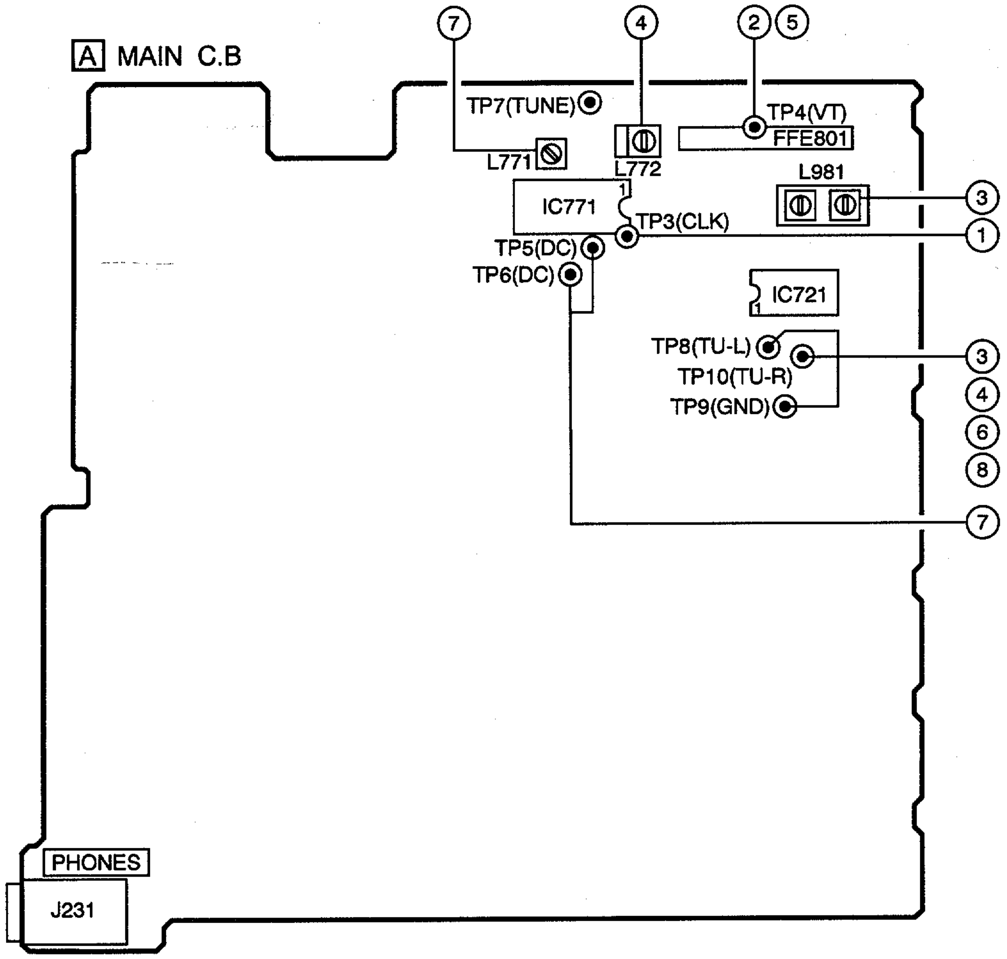
PIN CONNECTION

PIN NO.	45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23
CONNECTION	F2	F2	NP	NP	1G	2G	3G	4G	5G	6G	7G	8G	9G	10G	11G	P1	P2	P3	P4	P5	NC	NC	NC

PIN NO.	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
CONNECTION	NC	P6	P7	P8	P9	P10	P11	P12	P13	P14	P15	P16	P17	P18	P19	P20	P21	P22	NP	NP	F1	F1

NOTE 1) F1, F2 - - - FILAMENT
2) NP - - - - - - - NO PIN
3) NC - - - - - - - NO CONNECTION
4) DL - - - - - - - DATUM LINE
5) 1G~11G - - - GRID
6) FIELD OF VISION IS A MINIMUM OF 25° FROM THE LOWER SIDE

ADJUSTMENT – 1 <TUNER : U, LH, HR, EZ, K>



< TUNER SECTION >

1. Clock Frequency Check
   Settings : • Test point : TP3 (CLK)
   Method : Set to AM 1710kHz(U,LH), MW 1602kHz(HR, EZ, K) and check that the test point is 2160kHz ± 45Hz(U, LH), 2052kHz ± 45Hz(HR, EZ, K).

2. MW VT Check
   Settings : • Test point : TP4 (VT)
   Method : Set to MW 1710kHz (U, LH), MW 1602kHz(EZ, K, HR) and check that the test point is less than 8.5V (U, LH, HR), less than 8.0 V(EZ, K).
   Then set to 530 kHz(U, LH,), 531 kHz(EZ, K,HR) and check that the test point is more than 0.6 V (U, LH, EZ, K), more than 0.3 V(HR).

3. AM(MW) Tracking Adjustment
   Settings : • Test point : TP8 (TU-LCH)
   TP9 (GND)
   TP10 (TU-RCH)
   • Adjustment location : L981
   Method : Set to MW 1000kHz(U, LH), MW 999kHz(HR, EZ, K) and adjust L981 so that the test point becomes maximum.

4. AM IF Adjustment
   Settings : • Test point : TP8 (TU-LCH)
   TP9 (GND)
   TP10 (TU-RCH)
   L772 .... 450kHz

5. LW VT Adjustment<EZ, K>
   Settings : • Test point : TP4 (VT)
   • Adjustment location : L942
   Method : Set to LW 144kHz and adjust L942 so that the test point becomes 1.3 V ± 0.05 V.
   Then set to 290kHz and check that the test point is less than 8.0 V.

6. LW Tracking Adjustment<EZ, K>
   Settings : • Test point : TP8 (TU-LCH)
   TP9 (GND)
   TP10 (TU-RCH)
   • Adjustment location :
   L941 .... 144kHz
   TC942 .... 290kHz
   Method : Set up TC942 to center before adjustment. The level at 144kHz is adjusted to MAX by L941. Then the level at 290kHz is adjusted to MAX by TC942.

7. FM VT Check
   Settings : • Test point : TP4 (VT)
   Method : Set to FM 87.5MHz and check that the test point is more than 0.5V. Then set to 108.0MHz and check that the test point is less than 8.0 V.

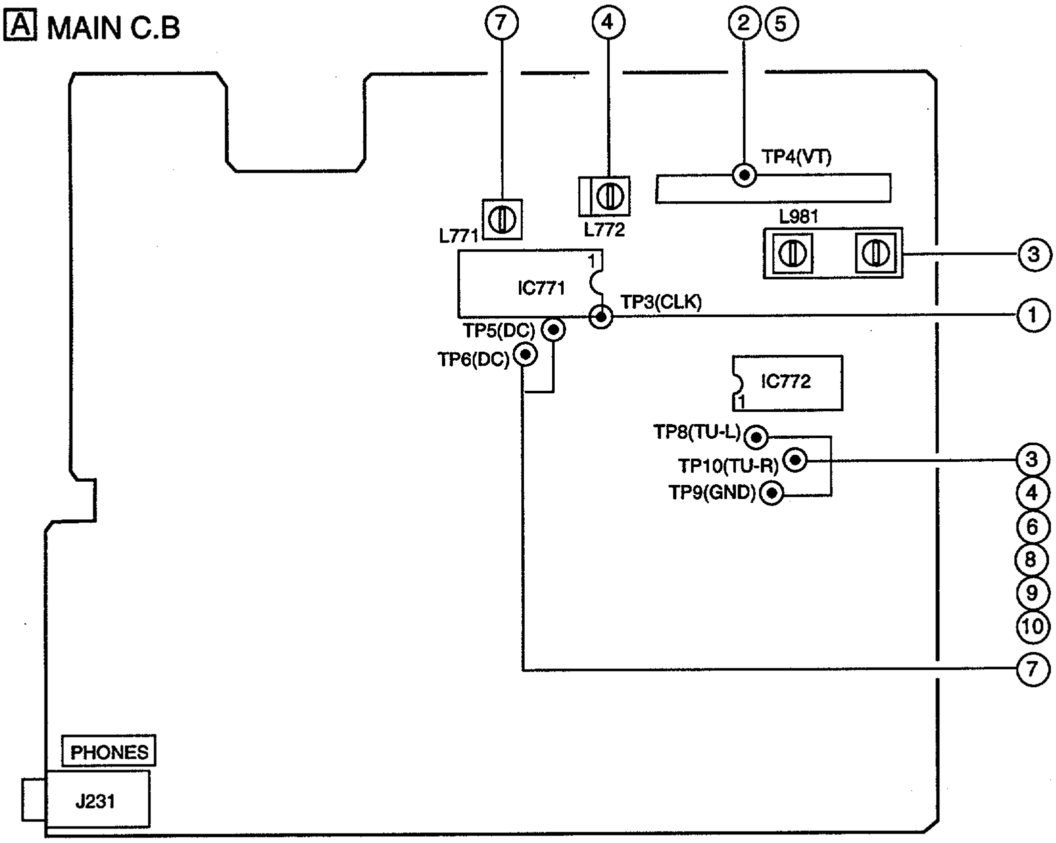
8. FM Tracking Check
   Settings : • Test point : TP8 (TU-LCH)
   TP9 (GND)
   TP10 (TU-RCH)
   Method : Set to FM 98.0MHz and check that the test point is less than 8dBuV(HR, LH, U), less than 13dB
   (EZ, K).

9. DC Balance / Mono Distortion Adjustment
   Settings : • Test point : TP5 (DC), TP6 (DC)
   • Adjustment location : L771
   • Input level : 60dBuV
   Method : Set to FM 98.0 MHz and adjust L771 so that the voltage between TP5 and TP6 becomes 0V ± 0.04V.
   Next, check that the distortion is less than 1.0%.

10. Auto Stop Level Check
    FM
    Settings : • Test point : TP8 (TU-L)
    TP9 (GND)
    TP10 (TU-R)
    • Input level : 60dBuV
    Method : Check the auto stop at FM98.0MHz(83.0MHz) and the input level is 15dB ~ 35dB.
    MW
    Settings : • Test point : TP8 (TU-L)
    TP9 (GND)
    TP10 (TU-R)
    • Input level : 60dBuV
    Method : Check the auto stop at MW 999kHz(HR, EZ, K), 1000kHz(LH, U) and the input level is 37dB ~ 62dB.

11. FM Separation Check
    Settings : • Test point : TP8 (TU-L)
    TP9 (GND)
    TP10 (TU-R)
    • Input level : 60dBuV
    Method : Set to FM 98.0 MHz and check that the test point is more than 12dB(EZ, K), more than 25dB(HR, LH, U).

ADJUSTMENT – 2 <TUNER : D>



＜チューナー部＞

1. クロック周波数確認
   設定：・テストポイント：TP3(CLK)
   方法：AM1602kHzに設定し、テストポイントが2052kHz±0.045kHzであることを確認する。

2. AM VT 確認
   設定：・テストポイント：TP4(VT)
   方法：AM1602kHzに設定し、テストポイントが8.0V以下であることを確認する。続けて、531kHzに設定し、テストポイントが0.6V以上であることを確認する。

3. AMトラッキング調整
   設定：・テストポイント：TP8(Lch), TP10(Rch), TP9(GND)
   ・調整箇所：L981(1/3)
   方法：AM999kHzに設定し、テストポイントが最大になるようにL981(1/3)を調整する。

4. AM IF調整
   設定：・テストポイント：TP8(Lch), TP10(Rch), TP9(GND)
   L772 .... 450kHz

5. FM VT 確認
   設定：・テストポイント：TP4(VT)
   方法：FM76MHzに設定し、テストポイントが0.4V以上であることを確認する。続いて、108.0MHzに設定し、テストポイントが9.0V以下であることを確認する。

6. FMトラッキング確認
   設定：・テストポイント：TP8(Lch), TP10(Rch), TP9(GND)
   方法：FM83.0MHzに設定し、テストポイントが8dB以下であることを確認する。

7. DCバランス・モノ歪率調整
   設定：・テストポイント：TP5, TP6 (DCバランス)
   ・調整箇所：L771
   ・入力レベル：60dB
   方法：FM83.0MHzに設定し、TP5とTP6間の電圧が0V±0.04VになるようにL771を調整する。次に、歪率が1.0%であることを確認する。

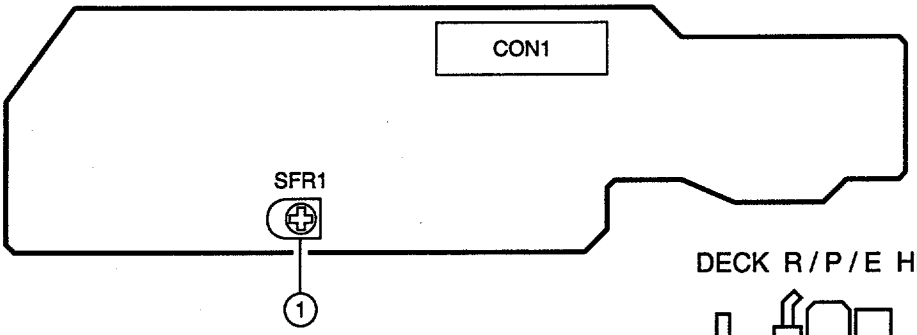
8. オートストップレベル確認
   FM
   設定：・テストポイント：TP8(Lch), TP10(Rch), TP9(GND)
   方法：FM98.0MHz(83.0MHz)でのオートストップ、および、入力レベルが15dB~35dBであることを確認する。
   AM
   設定：・テストポイント：TP8(Lch), TP10(Rch), TP9(GND)
   方法：AM999kHzでのオートストップ、および、入力レベルが37dB~62dBであることを確認する。

9. FMセパレーション確認
   設定：・テストポイント：TP8(Lch), TP10(Rch), TP9(GND)
   ・入力レベル：60dBuV
   方法：FM83.0MHzに設定し、テストポイントが25dB以上であることを確認する。

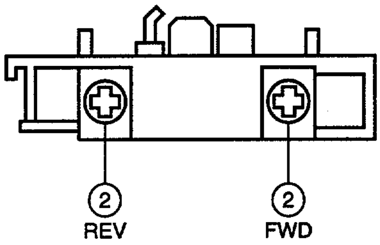
10. AMセパレーション確認
    設定：・テストポイント：TP8(Lch), TP10(Rch), TP9(GND)
    ・入力レベル：74dBuV
    方法：AM999kHzに設定し、テストポイントが15dB以上であることを確認する。

ADJUSTMENT – 3 <DECK : U, LH, HR, EZ, K>

G DECK C.B



DECK R / P / E HEAD



< DECK SECTION >

1. Tape Speed Adjustment
   Settings : • Test tape : TTA–100
   • Test point : SP–OUT
   • Adjustment location : SFR1
   Method : Play back the test tape and adjust SFR1 for 3000Hz ± 5Hz (FWD) and FWD PLAY speed ± 45Hz (REV).

2. Head Azimuth Adjustment
   Settings : • Test tape : TTA–300
   • Test point : SP–OUT
   • Adjustment location : Head azimuth adjustment screw
   Method : Play back the 8kHz signal of the test tape and adjust screw so that the output becomes maximum. Next, perform on each FWD PLAY and REV PLAY mode.

3. PB Frequency Response Check
   Settings : • Test tape : TTA–320
   • Test point : SP–OUT
   Method : Play back the 315Hz and 10kHz signals of the test tape and check that the 10kHz signal with respect to that of the 315Hz signal is 0dB ± 3dB.

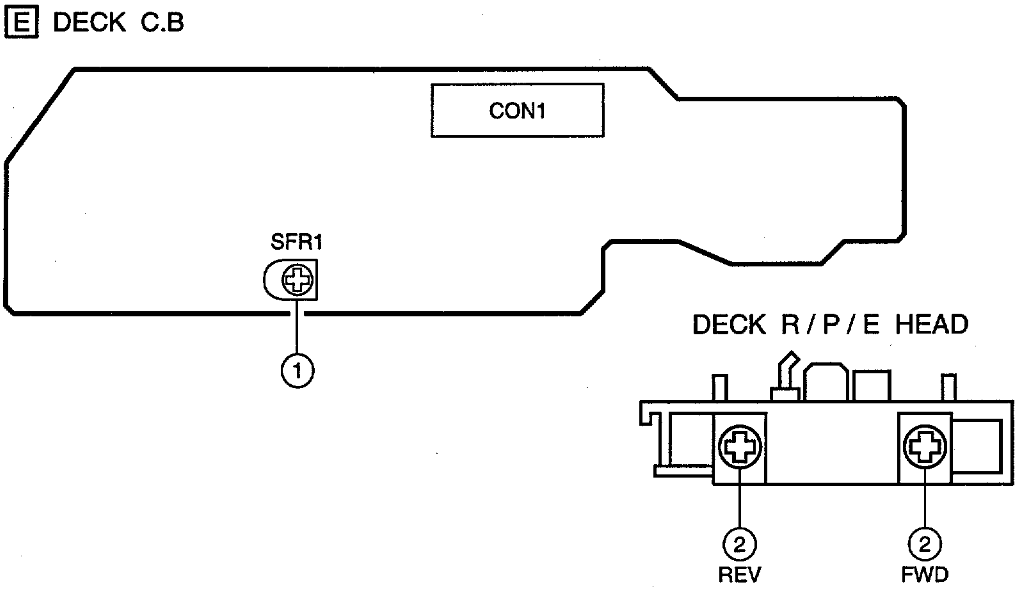
4. REC/PB Frequency Response Check
   Settings : • Test tape : TTA–602
   • Test point : SP–OUT
   Method : Input a –20VU signal to the AUX terminal. Record the 1kHz and 10kHz signals on the test tape and play back them. Check that the difference between the record level and the play back level at 1kHz and 10kHz signal is 0dB to ± 3dB.

PRACTICAL SERVICE FIGURE

<DECK SECTION>

Tape speed :	3000Hz ± 45Hz
Wow & flutter :	Less than 0.14% (W.R.M.S)
Pinch roller pressure :	270 ~ 330g
Take-up torque :	30 ~ 55g-cm (FWD, REV)
F.F & REW torque :	75 ~ 180g-cm
Back tension :	2 ~ 7g-cm (FWD, REV)
Distortion :	Less than 3.0% (REC/PB, 0VU)
Noise level :	Less than 80mV (PB, REC/PB, FILTER DIN AUDIO)
Erasing ratio :	More than 55dB (at 125Hz, +10VU)
Test tape :	TTA–100 TTA–602 (NORMAL)

ADJUSTMENT – 4 <DECK : D>



<デッキ部>

1. テープスピード調整
   設定：・テストテープ：TTA-100
   　　　・テストポイント：SP-OUT
   　　　・調整箇所：SFR1
   方法：テストテープを再生し、 周波数カウンターが3000Hz±5Hz(FWD)になるようにSFR1を調整する。次にREV側を3000HZ±45HZに調整する。

2. ヘッドアジマス調整
   設定：・テストテープ：TTA-300
   　　　・テストポイント：SP-OUT2V
   　　　・調整箇所：ヘッドアジマス調整ネジ
   方法：テストテープの8Khz信号を再生し、出力が最大になるようにネジを調整する。次に、FWD PLAYおよびREV PLAYモードで再生する。

3. 再生周波数特性
   設定：・テストテープ：TTA-320
   　　　・テストポイント：SP-OUT
   方法：テストテープの315Hzと10kHz信号を再生し、315Hz信号に関して、10kHz信号が0dB±3dBであることを確認する。

4. 録再周波数特性
   設定：・テストテープ：TTA-602
   　　　・テストポイント：AP-OUT
   方法：-20VU信号をAUX端子に入力し、その1kHzと10kHz信号をテストテープに録音し、再生する。1kHzと10kHz信号での録音レベルと再生レベルの相違が0dB±3dBであることを確認する。

PRACTICAL SERVICE FIGURE

<TUNER SECTION>

<FM SECTION>

IHF Sensitivity :	Less than 8dBuV
(THD 3%)	[at 76.0 / 83.0 / 108.0MHz]<D>
	Less than 8dBuV
	[at 98.0 / 108.0MHz]<U, LH, HR>
	Less than 10dBuV
	[at 87.5MHz]<U, LH, HR>
	Less than 13dBuV
	[at 98.0 / 108.0MHz]<EZ, K>
	Less than 14dBuV
	[at 87.5MHz]<EZ, K>
S/N 50dB Quieting sensitivity :	
	Less than 36dBuV
	[at 83.0MHz]<D>
	Less than 38dBuV
	[at 98.0MHz]<U, LH, HR>
	Less than 40dBuV
	[at 98.0MHz]<EZ, K>
Signal to noise ratio :	More than 66dB(STEREO)
(Input 54dB)	More than 68dB(MONO)
	[at 83.0MHz (MONO/STEREO)]<D>
	[at 98.0MHz (MONO/STEREO)]
	<EXCEPT D>
Distortion :	Less than 1.2%(MONO)
(Input 54dB)	Less than 2.0%(STEREO)
	[at 83.0MHz (MONO/STEREO)]<D>
	[at 98.0MHz (MONO/STEREO)]
	<EXCEPT D>
Auto stop level :	25dBuV ± 10dB
	[at 83.0MHz]<D>
	[at 98.0MHz]<EXCEPT D>
Stereo separation :	More than 30dB
	[at 83.0MHz]<D>
	[at 98.0MHz]<U, LH, HR>
	More than 15dB
	[at 98.0MHz]<EZ, K>
Intermediate frequency :	10.7MHz

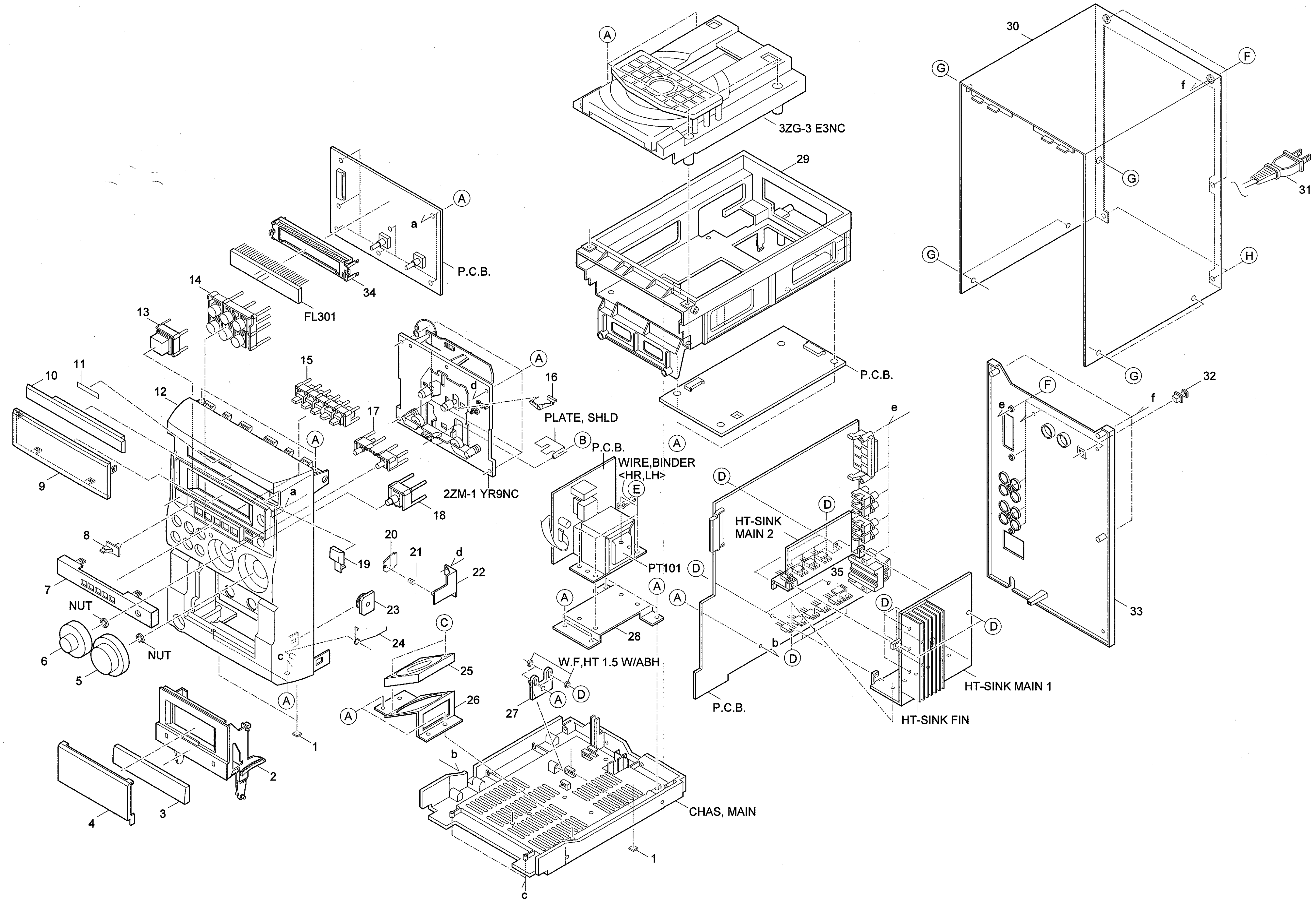
<AM(MW) SECTION>

Sensitivity :	54dBuV + 8/–7dB
	[at 600kHz]<U, LH>
	[at 603kHz]<EXCEPT U, LH>
	52dBuV + 6/–7dB
	[at 1000 / 1400kHz]<U, LH>
	[at 999 / 1404kHz]
	<EXCEPT U, LH>
Signal to noise ratio :	More than 36dB
(Input 74dB)	[at 1000kHz]<U,LH>
	[at 999kHz]<EXCEPT U, LH>
Distortion :	Less than 4.0%
	[at 999kHz]<D>
	[at 1000kHz]<U, LH>
	Less than 1.5%
	[at 999kHz]<EXCEPT D, U, LH>
Auto stop level :	50dBuV + 10/– 15dBuV
	[at 1000kHz]<U, LH>
	[at 999kHz]<EXCEPT U, LH>
Stereo separation :	More than 15dB
	[at 999kHz]<D>
Intermediate frequency :	450kHz

<LW SECTION>(EZ, K)

Sensitivity :	Less than 70dB[at 144kHz]
(S/N 20dB)	Less than 68dB[at 198kHz]
	Less than 66dB[at 290kHz]
Intermediate frequency :	450kHz

MECHANICAL EXPLODED VIEW 1 / 1


A
3ZG-3 E3NC
29
30
G
F
f
G
31
G
H
G
32
A
a
P.C.B.
34
FL301
14
13
15
A
16
d
PLATE, SHLD
B
P.C.B.
WIRE,BINDER
<HR,LH>
E
P.C.B.
A
e
F
e
f
33
11
10
12
A
17
9
a
2ZM-1 YR9NC
18
D
D
HT-SINK
MAIN 2
PT101
D
35
8
20
21
d
22
19
7
NUT
23
A
A
A
A
28
D
D
6
NUT
5
24
C
25
c
A
W.F,HT 1.5 W/ABH
D
b
D
HT-SINK MAIN 1
A
27
26
A
P.C.B.
HT-SINK FIN
1
b
2
4
3
CHAS, MAIN
1
c

MECHANICAL PARTS LIST 1 / 1

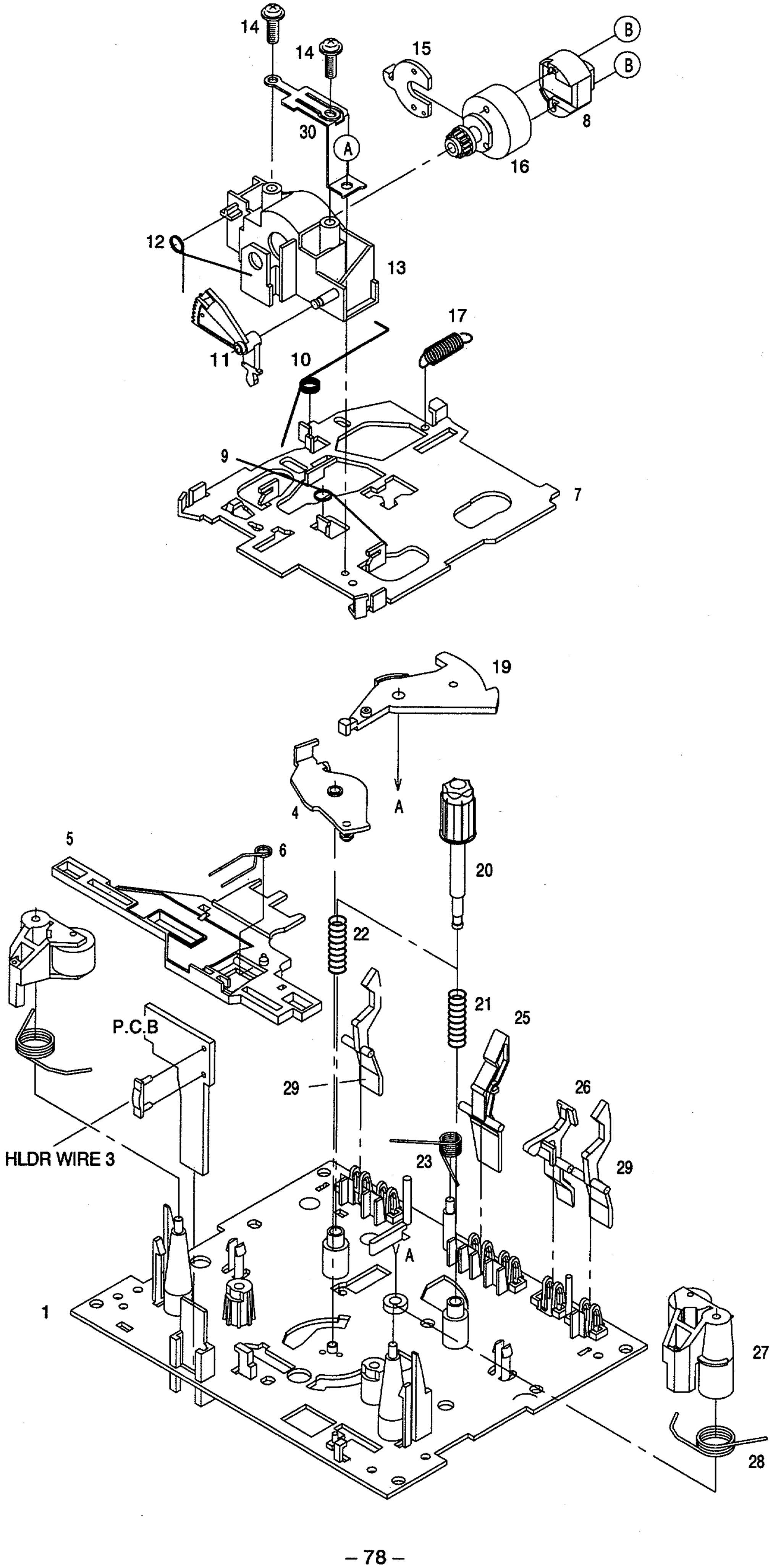
If can't understand for Description please kindly refer to " REFERENCE NAME LIST ".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	88-CL4-215-010	0E	CUSH,FOOT FR
2	8Z-CL6-030-010	--	BOX,CASS
3	8Z-CL6-038-010	1D	PANEL,CASS<HR,K,U,LH,D>
3	8Z-CL6-039-010		PANEL,CASS EZ<56EZ,57EZ>
4	8Z-CL6-050-010	--	WINDOW,CASS
5	8Z-CL6-080-010	1B	KNOB,RTRY VOL
6	8Z-CL6-081-010	1B	KNOB,RTRY JOG
7	8Z-CL6-040-010		PANEL,FR<HR,K,U,LH>
7	8Z-CL6-042-010	1C	PANEL,FR D<D>
7	8Z-CL6-041-010		PANEL,FR EZ<56EZ,57EZ>
8	8Z-CL6-085-010	--	LENS,STANDBY
9	8Z-CL6-045-010	--	WINDOW,DISP<HR,K,U,LH,D>
9	8Z-CL6-046-010		WINDOW,DISP EZ<56EZ,57EZ>
10	8Z-CL6-036-010	--	PANEL,TRAY
11	87-B00-002-010	0E	BADGE,AIWA 30 ABS SIL
12	8Z-CL6-005-010		CABI,FR EZ 57<57EZ>
12	8Z-CL6-001-010	--	CABI,FR U<EXCEPT 57EZ>
13	8Z-CL6-060-010	1B	KEY,POWER
14	8Z-CL6-064-010	1C	KEY,CON
15	8Z-CL6-076-010	--	KEY,FUNC ASSY
16	82-ZM1-264-010	0E	LVR,EJECT R
17	8Z-CL6-062-010	--	KEY,ENTER
18	8Z-CL6-063-010	--	KEY,DEMO
19	8Z-CL6-061-010	--	KEY,OPEN
20	82-NF5-229-010	0E	PLATE,LOCK
21	86-NF9-224-010	0E	SPR-C,LOCK
22	87-NF4-217-110	0E	HLDR,LOCK 2
23	87-NF8-220-010	0E	DMPR,150
24	88-CL4-220-010	0E	SPR-T,CASS
25	87-A91-348-010	2A	FAN, F614R-12MC-19-175MM
26	8Z-CL6-226-010	--	HLDR,FAN
27	8Z-CL6-222-010	--	HLDR,HT-SINK
28	8Z-CL6-225-010	--	HLDR,TRANS
29	8Z-CL6-202-010	--	HLDR,CD
30	8Z-CL6-025-010	--	CABI,TOP
⚠ 31	87-050-098-010	1B	AC CODE ASSY,D<D>
⚠ 31	87-A80-092-010		AC CORD ASSY,ESUN<EXCEPT K,U,D>
⚠ 31	87-050-108-010		AC CORD ASSY,K 3PH<K>
⚠ 31	87-A80-110-010		AC CORD ASSY,U SPT-2W<U>
32	84-ZG1-245-210	0E	CAP,OPTICAL
33	8Z-CL6-012-010		PANEL,REAR EZ<56EZ>
33	8Z-CL6-017-010		PANEL,REAR EZ 57<57EZ>
33	8Z-CL6-016-010		PANEL,REAR HRJ<HR>
33	8Z-CL6-013-010		PANEL,REAR K<K>
33	8Z-CL6-011-010		PANEL,REAR LH<LH>
33	8Z-CL6-010-010		PANEL,REAR U<U>
34	82-NF7-210-110	0E	GUIDE,FL (*)
35	8Z-CL6-228-010	--	HLDR,DIODE
A	87-067-703-010	0E	TAPPING SCREW, BVT2+3-10
B	87-571-032-410	0E	VIT+2-3
C	87-067-822-010	0E	BVT2+3-20 W/O SLOT
D	87-067-689-010	0E	TAPPING SCREW, BVTT+3-8
E	87-581-169-410	0E	UIT+4-6
F	87-B10-230-010	0E	BVT2+3-10 W/O SLOT SILVER CR
G	87-B10-231-010	0E	QT1+3-12 SILVER CR
H	87-B10-250-010	0E	BVT2+3-12 W/O SLOT CR SILVER

COLOR NAME TABLE

Basic color symbol	Color	Basic color symbol	Color	Basic color symbol	Color
B	Black	C	Cream	D	Orange
G	Green	H	Gray	L	Blue
LT	Transparent Blue	N	Gold	P	Pink
R	Red	S	Silver	ST	Titan Silver
T	Brown	V	Violet	W	White
WT	Transparent White	Y	Yellow	YT	Transparent Yellow
LM	Metallic Blue	LL	Light Blue	GT	Transparent Green
LD	Dark Blue	DT	Transparent Orange		

TAPE MECHANISM EXPLODED VIEW 1 / 1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B
B
30
A
8
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12
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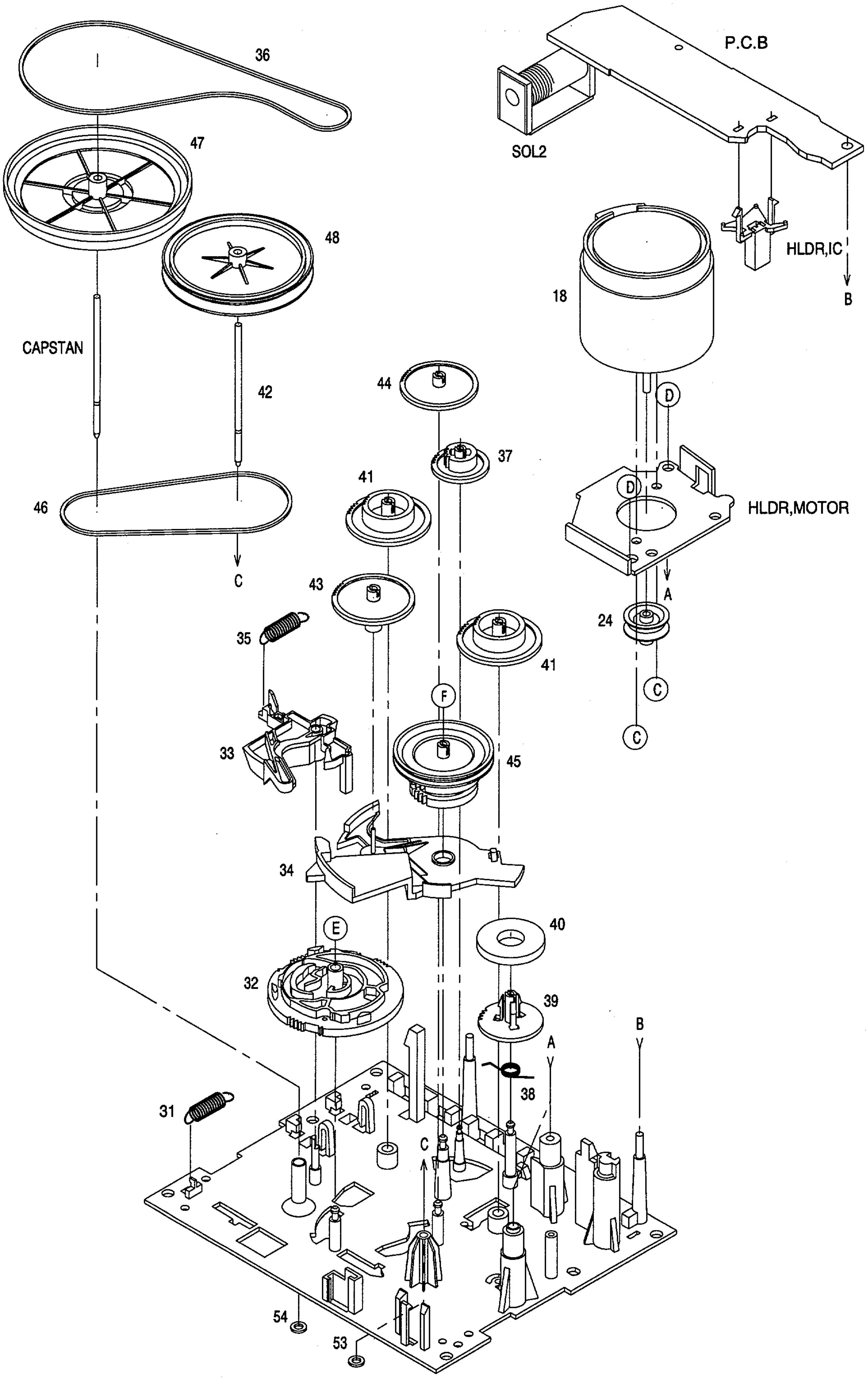
17
11
10
9
7
19
4
A
5
6
20
3
22
21
25
P.C.B
2
29
26
23
29
HLDR WIRE 3
A
1
27
28


36
P.C.B
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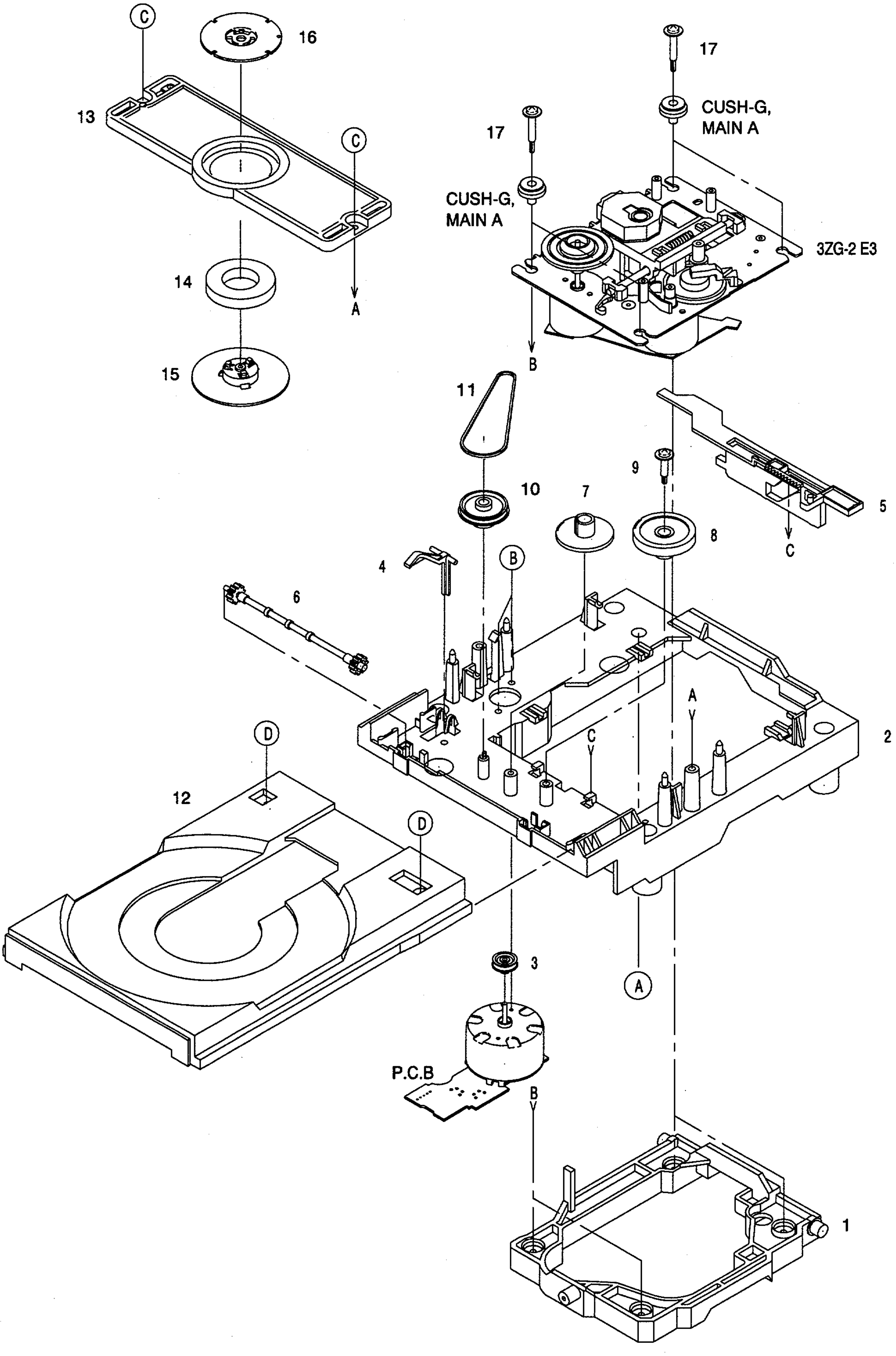
SOL2
48
HLDR,IC
18
B
CAPSTAN
42
44
D
37
41
D
HLDR,MOTOR
46
C
A
43
24
35
41
F
C
C
33
45
34
40
E
32
39
B
A
38
31
C
54
53

TAPE MECHANISM PARTS LIST 1 / 1

If can't understand for Description please kindly refer to " REFERENCE NAME LIST ".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	82-ZM1-327-310	1D	CHAS ASSY,RM
2	82-ZM1-258-210	0E	SPR-T,PINCH L
3	82-ZM1-341-210	1A	LVR ASSY,PINCH L2
4	82-ZM1-295-310	0E	PLATE ASSY LINK
5	82-ZM1-266-310	0E	LVR,DIR
6	82-ZM1-214-010	0E	SPR-T,DIR
7	82-ZM1-206-910	1A	CHAS,HEAD
8	87-046-399-110	2A	HEAD,PPH YK56R-BS411
9	82-ZM1-269-210	0E	SPR-T,BRG
10	82-ZM3-323-110	0E	SPR-T,LINK 3
11	82-ZM1-210-110	0E	GEAR,H T
12	82-ZM1-213-010	0E	SPR-T,HEAD
13	82-ZM1-207-910	0E	GUIDE,TAPE
14	82-ZM1-283-310	0E	S-SCREW,AZIMUTH
15	82-ZM1-314-110	0E	PLATE,HEAD
16	82-ZM1-208-310	0E	HLDR,HEAD
17	82-ZM1-218-010	0E	SPR-E,HB
18	87-045-347-010	1H	MOT,SHU2L 70
19	82-ZM1-222-210	0E	LVR,PLAY
20	82-ZM1-217-410	0E	REEL TABLE
21	82-ZM1-244-510	0E	SPR-C,BT
22	82-ZM1-285-410	0E	SPR-C,BT L
23	82-ZM1-257-010	0E	SPR-T,CAS
24	82-ZM1-247-110	0E	PULLEY,MOTOR
25	82-ZM1-242-010	0E	LVR,CAS
26	82-ZM1-243-010	0E	LVR,STOP
27	82-ZM1-344-210	1A	LVR ASSY,PINCH R2
28	82-ZM1-259-210	0E	SPR-T,PINCH R
29	82-ZM1-240-110	0E	LVR,REC(*)
30	82-ZM1-298-010	0E	SPR-P EARTH
31	82-ZM1-255-310	0E	SPR-E,LVR DIR
32	82-ZM1-221-310	0E	GEAR,CAM(*)
33	82-ZM1-227-310	0E	LVR,TRIG
34	82-ZM1-224-410	0E	LVR,FR
35	82-ZM1-305-210	0E	SPR-E,TRIG 2
36	82-ZM1-340-010	0E	BELT,SBU MAIN2
37	82-ZM1-223-010	0E	GEAR,PLAY
38	82-ZM1-322-010	0E	SPR-T,FR 60
39	82-ZM1-220-210	0E	GEAR,IDLER
40	82-ZM3-616-010	0E	RING MAGNET 4
41	82-ZM1-216-410	0E	GEAR,REEL
42	82-ZM1-236-010	0E	CAPSTAN,2-41.5
43	82-ZM1-225-210	0E	GEAR,FR
44	82-ZM1-226-010	0E	GEAR,REW
45	82-ZM3-333-310	1B	SLIP DISK ASSY 2
46	82-ZM1-338-110	0E	BELT,FR 4
47	82-ZM1-349-110	1B	FLY-WHL,R W
48	82-ZM1-348-110	1B	FLY-WHL,L W
A	82-ZM1-315-010	0E	S-SCREW GUIDE TAPE
B	80-ZM6-207-010	0E	V+1.6-7
C	87-251-070-410	0E	U+2.6-3
D	87-741-073-410	0E	UT2+2.6-6 GLD
E	87-B10-008-010	0E	W-P,2.08-8-0.4-SLIP
F	82-ZM1-247-210	0E	PULLEY,MOTOR

CD MECHANISM EXPLODED VIEW 1 / 2



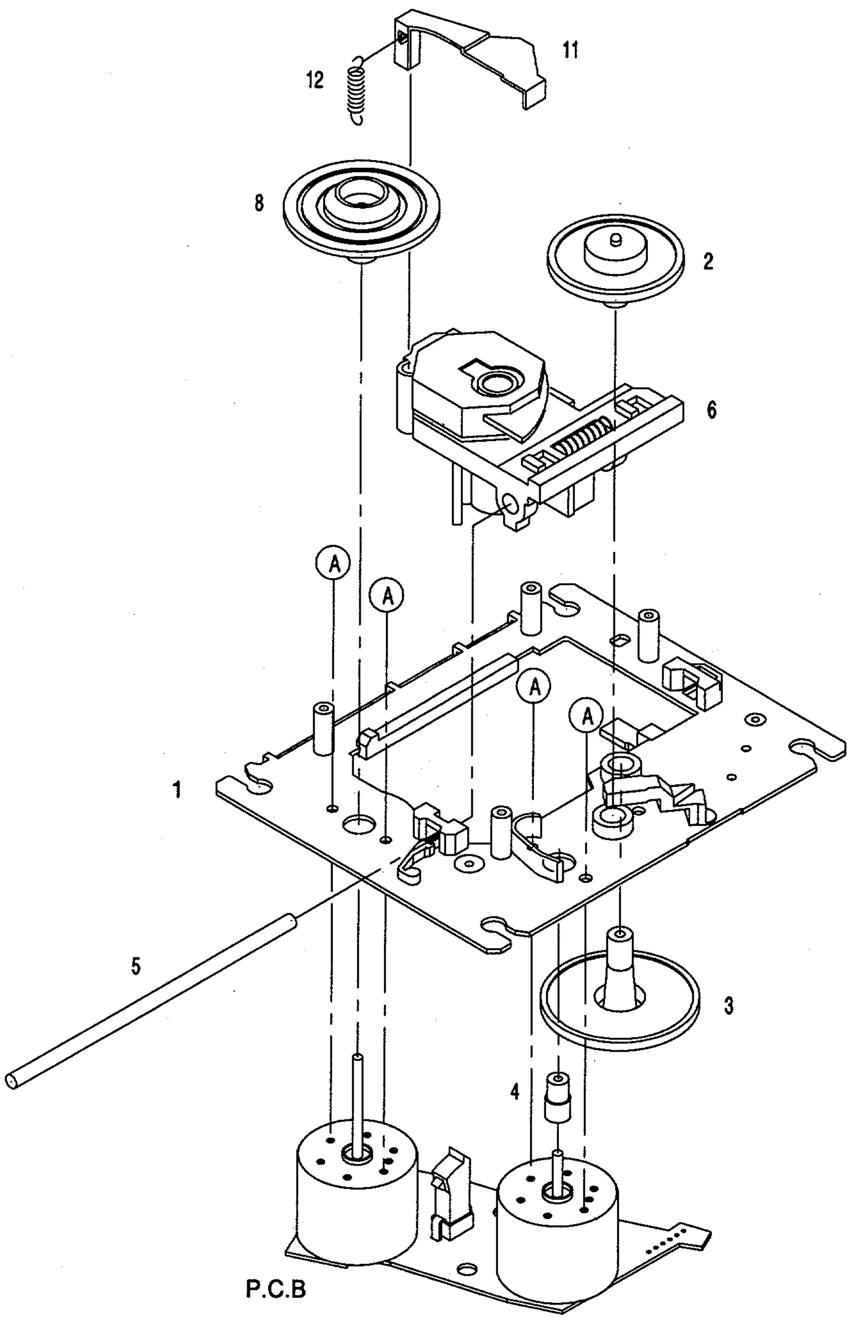
C
16
17
13
C
17
CUSH-G,
MAIN A
CUSH-G,
MAIN A
3ZG-2 E3
14
A
15
B
11
9
10
7
8
5
C
4
B
6
A
2
D
C
12
D
3
A
P.C.B
B
1

CD MECHANISM PARTS LIST 1 / 2

If can't understand for Description please kindly refer to " REFERENCE NAME LIST ".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	83-ZG3-224-510	1B	HLDR M2
2	83-ZG3-228-610	1C	CHAS,L6
3	83-ZG3-208-010	0E	PULLEY,MOTOR
4	83-ZG3-213-010	0E	LVR,SW
5	83-ZG3-209-610	1A	CAM,SLIDE
6	83-ZG3-207-010	0E	GEAR,TRAY
7	83-ZG3-204-210	0E	GEAR,C
8	83-ZG3-205-010	0E	GEAR,D
9	83-ZG3-217-010	0E	S-SCREW,GEAR D
10	83-ZG3-220-210	0E	GEAR,PULLEY 2
11	83-ZG3-214-010	0E	BELT,L
12	83-ZG3-229-410	1C	TRAY,CD 2
13	83-ZG3-210-110	1B	HLDR,CHUCK
14	83-ZG3-602-010	1A	RING,MAG
15	83-ZG3-212-010	0E	CAP,DISC
16	83-ZG3-211-010	0E	PLATE,DISC
17	81-ZG1-254-010	0E	S-SCREW,MECH HLDR
A	87-067-945-110	0E	VFT2+3-12(F10)
B	87-251-071-410	0E	U+2.6-4
C	87-512-074-210	0E	SCREW, 2+2.6-8
D	87-352-075-210	0E	VT2+2.6-10

CD MECHANISM EXPLODED VIEW 2 / 2

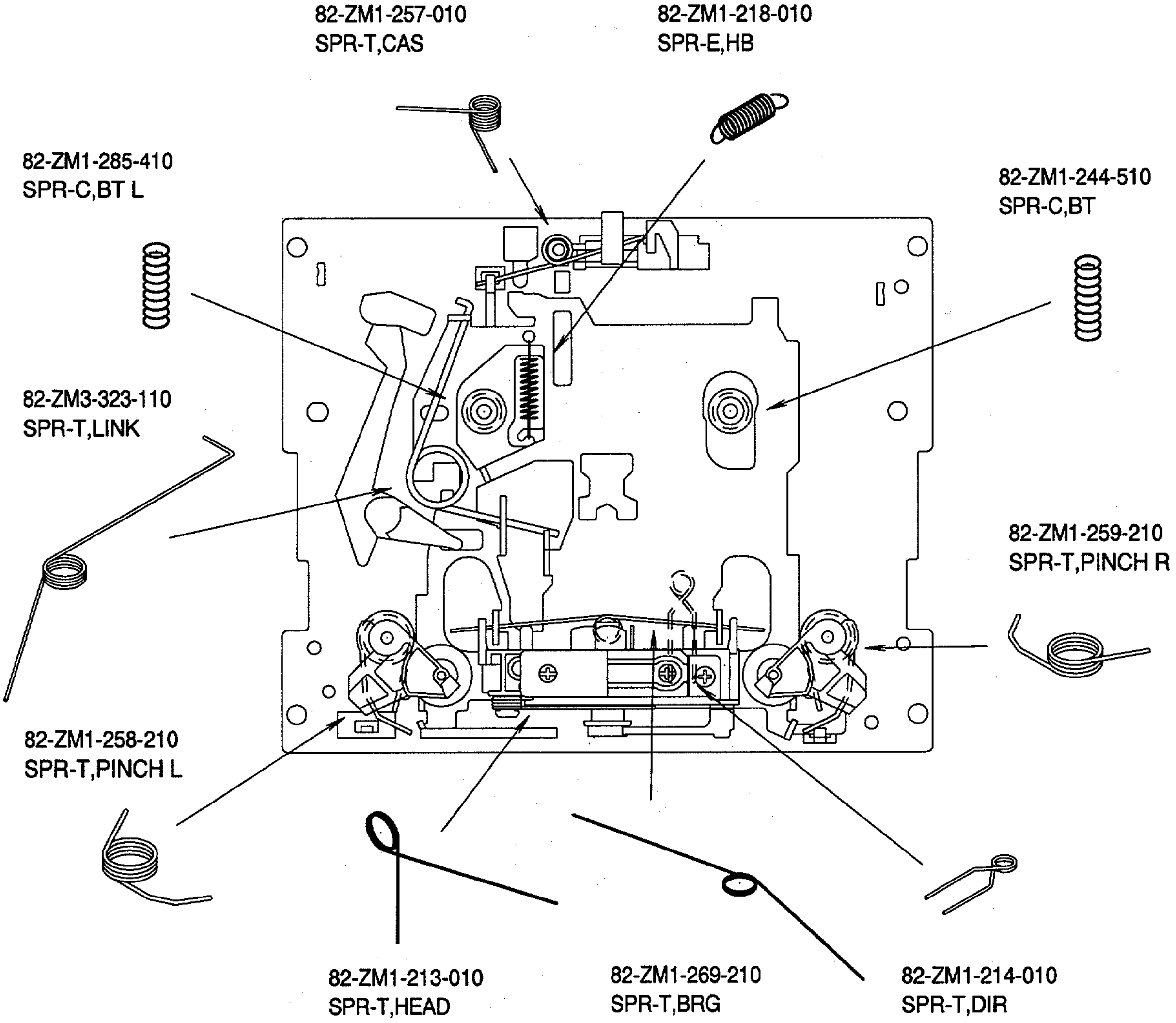


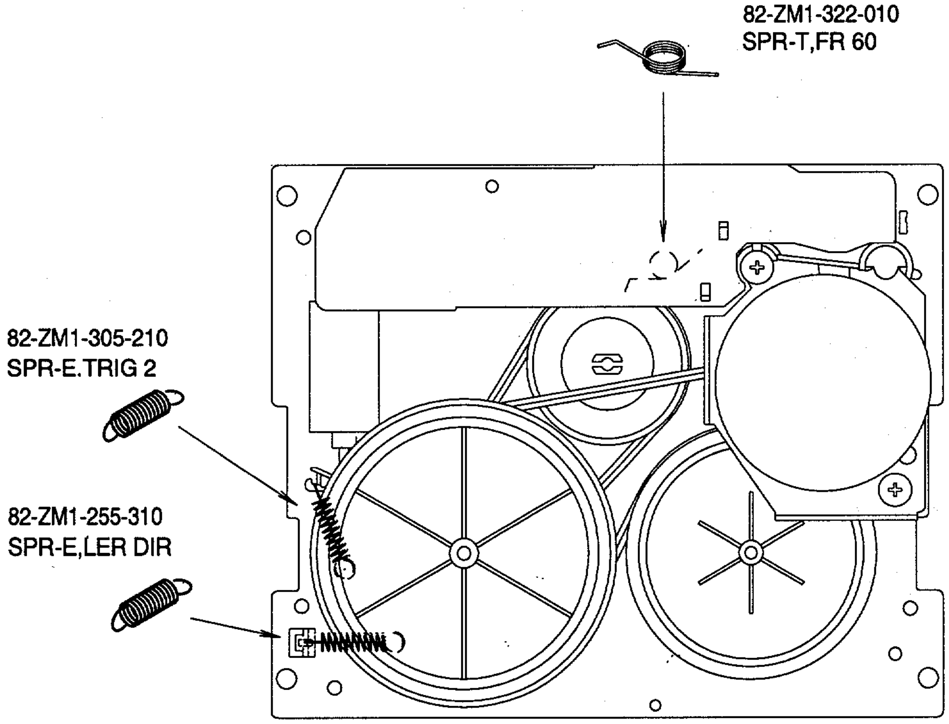
CD MECHANISM PARTS LIST 2 / 2

If can't understand for Description please kindly refer to " REFERENCE NAME LIST ".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	83-ZG2-243-210	--	CHAS ASSY,SHT
2	83-ZG2-235-010	--	GEAR,A3
3	83-ZG2-205-210	0E	GEAR,B
4	83-ZG2-236-010	--	GEAR MOTOR 3
5	83-ZG2-253-010	1A	SHAFT,SLIDE 5
6	87-A90-836-010	--	PICKUP,KSS-213F
8	83-ZG2-227-210	1B	TURN TABLE,C1
11	83-ZG2-245-410	--	LEVER,SHUTTER
12	83-ZG2-250-110	--	SPR-E,SHT 2
A	87-261-032-210	0E	SCREW V+2-3

SPRING APPLICATION POSITION


82-ZM1-257-010
SPR-T,CAS
82-ZM1-218-010
SPR-E,HB
82-ZM1-285-410
SPR-C,BT L
82-ZM1-244-510
SPR-C,BT
82-ZM3-323-110
SPR-T,LINK
82-ZM1-259-210
SPR-T,PINCH R
82-ZM1-258-210
SPR-T,PINCH L
82-ZM1-213-010
SPR-T,HEAD
82-ZM1-269-210
SPR-T,BRG
82-ZM1-214-010
SPR-T,DIR


82-ZM1-322-010
SPR-T,FR 60
82-ZM1-305-210
SPR-E.TRIG 2
82-ZM1-255-310
SPR-E,LER DIR

ACCESSORIES / PACKAGE LIST

If can't understand for Description please kindly refer to " REFERENCE NAME LIST ".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	8Z-CL6-906-010	--	IB,D (J)-C<D>
1	8Z-CL6-905-010		IB,E (9L)-C<EZ>
1	8Z-CL6-902-010		IB,H (ESC)-C<HR>
1	8Z-CL6-904-010		IB,K (E)-C<K>
1	8Z-CL6-903-010		IB,LH (ESP)-C<LH>
1	8Z-CL6-901-010		IB,U (ESF)-C<U>
2	87-043-115-010	1A	ANT,FEEDER FM<HR,U,LH,D>
2	87-A90-118-010		ANT,WIRE FM (Z)<K,EZ>
⚠ 3	87-A91-017-010		PLUG,CONVERSION JT-0476<HR,LH>
4	87-A90-030-010	1B	ANT,LOOP AM-NC C
5	8Z-CK4-962-010	1H	RC UNIT,RC-ZAT04 (VS)

REFERENCE NAME LIST

ELECTRICAL SECTION

DESCRIPTION	REFERENCE NAME
ANT	ANTENNAS
C-	CHIP
C-CAP	CAP, CHIP
C-CAP TN	CAP, CHIP TANTALUM
C-COIL	COIL, CHIP
C-DI	DIODE, CHIP
C-DIODE	DIODE, CHIP
C-FET	FET, CHIP
C-FOTR	FILTER, CHIP
C-JACK	JACK, CHIP
C-LED	LED, CHIP
C-RES	RES, CHIP
C-SFR	SFR, CHIP
C-SLIDE SW	SLIDE SWITCH, CHIP
C-SW	SWITCH, CHIP
C-TR	TRANSISTOR, CHIP
C-VR	VOLUME, CHIP
C-ZENER	ZENER, CHIP
CAP, CER	CAP, CERA-SOL
CAP, E	CAP, ELECT
CAP, M/F	CAP, FILM
CAP, TC	CAP, CERA-SOL
CAP, TC-U	CAP, CERA-SOL SS
CAP, TN	CAP, TANTALUM
CERA FIL	FILTER, CERAMIC
CF	FILTER, CERAMIC
DL	DELAY LINE
E/CAP	CAP, ELECT
FILT	FILTER
FLTR	FILTER
FUSE RES	RES, FUSE
MOT	MOTOR
P-DIODE	PHOTO DIODE
P-SNSR	PHOTO SENSER
P-TR	PHOTO TRANSISTOR
POLY VARI	VARIABLE CAPACITOR
PPCAP	CAP, PP
PT	POWER TRANSFORMER
PTR, RES	PTR, MELF
RC	REMOTE CONTROLLER
RES NF	RES, NON-FLAMMABLE
RESO	RESONATOR
SHLD	SHIELD
SOL	SOLENOID
SPKR	SPEAKER
SW, LVR	SWITCH, LEVER
SW, RTRY	SWITCH, ROTARY
SW, SL	SWITCH, SLIDE
TC CAP	CAP, CERA-SOL
THMS	THERMISTOR
TR	TRANSISTOR
TRIMER	CAP, TRIMMER
TUN-CAP	VARIABLE CAPACITOR
VIB, CER	RESONATOR, CERAMIC
VIB, XTAL	RESONATOR, CRYSTAL
VR	VOLUME
ZENER	DIODE, ZENER
サージサプレッサ	SERGE SUPPRESSOR
セラコン	CAP, CERA

MECHANICAL SECTION

DESCRIPTION	REFERENCE NAME
ADHESHIVE	SHEET ADHESHIVE
AZ	AZIMUTH
BAR-ANT	BAR-ANTENNA
BAT	BATTERY
BATT	BATTERY
BRG	BEARING
BTN	BUTTON
CAB	CABINET
CASS	CASSETTE
CHAS	CHASSIS
CLR	COLLAR
CONT	CONTROL
CRSR	CURSOR
CU	CUSHION
CUSH	CUSHION
DIR	DIRECTION
DUBB	DUBBING
FL	FRONT LOADING
FLY-WHL	FLYWHEEL
FR	FRONT
FUN	FUNCTION
G-CU	G-CUSHION
HDL	HANDOL
HIMERON	CLOTH
HINGE, BAT	HINGE, BATTERY
HLDR	HOLDER
HT-SINK	HEAT SINK
IB	INSTRUCTION BOOKLET
IDLE	IDLER
IND, L-R	INDICATOR, L-R
KEY, CONT	KEY, CONTROL
KEY, PRGM	KEY, PROGRAM
KNOB, SL	KNOB, SLIDE
LBL	LABEL
LID, BATT	LID, BATTERY
LID, CASS	LID, CASSETTE
LVR	LEVER
P-SP	P-SPRING
PANEL, CONT	PANEL, CONTROL
PANEL, FR	PANEL, FRONT
PRGM	PROGRAM
PULLY, LOAD MO	PULLY, LOAD MOTOR
RBN	RIBBON
S-	SPECIAL
SEG	SEGMENT
SH	SHEET
SHLD-SH	SHIELD-SHEET
SL	SLIDE
SP	SPRING
SP-SCREW	SPECIAL-SCREW
SPACER, BAT	SPACER, BATTERY
SPR	SPRING
SPR-P	P-SPRING
SPR-PC-PUSH	P-SPRING, C-PUSH
T-SP	T-SPRING
TERM	TERMINAL
TRIG	TRIGGER
TUN	TUNING
VOL	VOLUME
W	WASHER
WHL	WHEEL
WORM-WHL	WORM-WHEEL
ジグアーム	ARM, SHAFT
ジグガイド	GUIDE, SHAFT
ストラップ	STRAP
トクナベ	S-SCREW
ヒンジ	HINGE
ヒンジビス	S-SCREW
ビスセレート	SCREW, SERPART

サービス技術ニュース	
番号	連絡内容
G—　—	
G—　—	
G—　—	

アイワ株式会社
AIWA CO.,LTD.

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Tokyo Japan

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Printed in Singapore

XR-M55
XR-M56
XR-M57

COMPACT DISC STEREO SYSTEM

- BASIC TAPE MECHANISM: 2ZM–1 YR9NC
- BASIC CD MECHANISM: 3ZG–3 E3NC

- TYPE: HR,K<M55>
  EZ<M56/M57>

SIMPLE MANUAL

• Replace this Service Manual with "Revision Publishing" when it is issued.

S/M Code No. 09–994–408–2T2

SERVICE MANUAL

ELECTRICAL MAIN PARTS LIST - 1/8

NOTE: The characters in the suffix column indicate the part usage.

55HR ....................XX...................................A..................
55K ....................XX....................................B.................
56EZ ...................XX.....................................C................
57EZ ...................XX......................................D...............

REF.NO		PARTS NO.	KANRI NO.	DESCRIPTION	SUFFIX
C	301	87-010-178-080	0E	CHIP CAP 1000P	ABCD
C	302	87-010-197-080	0E	CAP, CHIP 0.01 DM	ABCD
C	309	87-010-198-080	0E	CAP, CHIP 0.022	ABCD
C	308	87-010-404-040	0E	CAP,E 4.7-50 SME	ABCD
C	307	87-010-404-040	0E	CAP,E 4.7-50 SME	ABCD
C	304	87-010-405-040	0E	CAP,E 10-50	ABCD
C	305	87-A10-078-040		CAP,E 47-35 REA	ABCD
C	316	87-010-197-080	0E	CAP, CHIP 0.01 DM	ABCD
C	317	87-010-198-080	0E	CAP, CHIP 0.022	ABCD
C	315	87-010-198-080	0E	CAP, CHIP 0.022	ABCD
C	314	87-010-248-040	0E	CAP,E 220-10 SME	ABCD
C	313	87-010-263-040	0E	CAP,E 100-10	ABCD
C	319	87-010-320-080	0E	CHIP CAP 68P	ABCD
C	318	87-010-320-080	0E	CHIP CAP 68P	ABCD
C	326	87-010-176-080	0E	C-CAP,S 680P-50 SL	ABCD
C	329	87-010-198-080	0E	CAP, CHIP 0.022	ABCD
C	325	87-010-320-080	0E	CHIP CAP 68P	ABCD
C	327	87-010-320-080	0E	CHIP CAP 68P	ABCD
C	323	87-010-320-080	0E	CHIP CAP 68P	ABCD
C	328	87-010-320-080	0E	CHIP CAP 68P	ABCD
C	322	87-010-320-080	0E	CHIP CAP 68P	ABCD
C	324	87-010-320-080	0E	CHIP CAP 68P	ABCD
C	321	87-010-320-080	0E	CHIP CAP 68P	ABCD
C	320	87-010-320-080	0E	CHIP CAP 68P	ABCD
C	338	87-010-197-080	0E	CAP, CHIP 0.01 DM	ABCD
C	331	87-010-312-080	0E	C-CAP,S 15P-50 CH	ABCD
C	335	87-010-316-080	0E	C-CAP,S 33P-50 CH	ABCD
C	330	87-010-318-080	0E	C-CAP,S 47P-50 CH	ABCD
C	333	87-010-401-040	0E	CAP,E 1-50 SME	ABCD
C	339	87-015-819-080	0E	CAPACITOR,0.01	ABCD
CN	303	87-099-203-010	0E	CONN,10P 6216 H	ABCD
CN	301	87-099-720-010	1B	CONN,30P TYK-B(P)	ABCD
CN	302	87-CL4-704-010	1B	CONN ASSY 9P DECK	ABCD
D	308	87-020-465-080	0E	DIODE,1SS133 (110MA)	.BCD
D	309	87-020-465-080	0E	DIODE,1SS133 (110MA)	..CD
D	301	87-020-465-080	0E	DIODE,1SS133 (110MA)	ABCD
D	307	87-020-465-080	0E	DIODE,1SS133 (110MA)	....
D	316	87-017-931-080	0E	ZENER,MTZJ5.6B	ABCD
D	312	87-020-465-080	0E	DIODE,1SS133 (110MA)	ABCD
D	310	87-020-465-080	0E	DIODE,1SS133 (110MA)	ABCD
D	317	87-020-465-080	0E	DIODE,1SS133 (110MA)	ABCD
D	313	87-020-465-080	0E	DIODE,1SS133 (110MA)	ABCD
D	318	87-020-465-080	0E	DIODE,1SS133 (110MA)	ABCD
D	315	87-020-465-080	0E	DIODE,1SS133 (110MA)	ABCD
D	314	87-020-465-080	0E	DIODE,1SS133 (110MA)	ABCD
D	311	87-020-465-080	0E	DIODE,1SS133 (110MA)	ABCD
D	319	87-020-465-080	0E	DIODE,1SS133 (110MA)	ABCD
D	323	87-020-465-080	0E	DIODE,1SS133 (110MA)	ABCD
D	325	87-020-465-080	0E	DIODE,1SS133 (110MA)	ABCD
D	326	87-020-465-080	0E	DIODE,1SS133 (110MA)	ABCD
D	320	87-020-465-080	0E	DIODE,1SS133 (110MA)	ABCD
D	322	87-020-465-080	0E	DIODE,1SS133 (110MA)	ABCD
D	324	87-020-465-080	0E	DIODE,1SS133 (110MA)	..CD
D	327	87-020-465-080	0E	DIODE,1SS133 (110MA)	ABCD
FL	301	8Z-CL6-682-010	2M	FL,11BT-171GK	ABCD
GFL	1	82-NF7-210-110	0E	GUIDE,FL (*)	ABCD
IC	303	87-A20-914-010	1B	IC,SPS-442-1-F	ABCD
IC	301	8Z-CL7-683-010	1H	C-IC,M38B557MC	ABCD
LED	301	87-A40-229-040	0E	LED,SLR-342VR TB7 RED	ABCD
LED	302	87-A40-619-040	0E	LED,SLR-56PT-T31-W GRN	ABCD
LED	305	87-A40-619-040	0E	LED,SLR-56PT-T31-W GRN	ABCD
LED	304	87-A40-619-040	0E	LED,SLR-56PT-T31-W GRN	ABCD
LED	303	87-A40-619-040	0E	LED,SLR-56PT-T31-W GRN	ABCD
LED	306	87-A40-619-040	0E	LED,SLR-56PT-T31-W GRN	ABCD
Q	301	87-026-245-080	0E	TR,DTC114ES	ABCD
Q	309	89-111-624-080	0E	TR,2SA1162Y	ABCD
Q	302	89-112-965-080	0E	TR,2SA1296 (0.75W)	ABCD
Q	303	89-112-965-080	0E	TR,2SA1296 (0.75W)	ABCD
Q	307	89-327-125-080	0E	CHIP TR,2SC2712GR	ABCD
Q	304	89-327-125-080	0E	CHIP TR,2SC2712GR	ABCD
Q	305	89-327-125-080	0E	CHIP TR,2SC2712GR	ABCD
Q	308	89-327-125-080	0E	CHIP TR,2SC2712GR	ABCD
Q	306	89-327-125-080	0E	CHIP TR,2SC2712GR	ABCD
Q	313	87-026-235-080	0E	CHIP-TR,DTC114EK	ABCD
Q	310	87-A30-090-080	0E	FET,2SK2541	ABCD
Q	311	89-327-125-080	0E	CHIP TR,2SC2712GR	ABCD
Q	312	89-327-125-080	0E	CHIP TR,2SC2712GR	ABCD
R	399	87-010-320-080	0E	CHIP CAP 68P	ABCD
R	395	87-010-320-080	0E	CHIP CAP 68P	ABCD
R	397	87-010-320-080	0E	CHIP CAP 68P	ABCD
R	398	87-010-320-080	0E	CHIP CAP 68P	ABCD
R	396	87-010-320-080	0E	CHIP CAP 68P	ABCD
R	400	87-010-320-080	0E	CHIP CAP 68P	ABCD

ELECTRICAL MAIN PARTS LIST - 2/8

R	401	87-010-320-080	0E	CHIP CAP 68P	ABCD................
R	402	87-010-320-080	0E	CHIP CAP 68P	ABCD................
S	303	87-A90-095-080	0E	SW,TACT EVQ11G04M	ABCD................
S	305	87-A90-095-080	0E	SW,TACT EVQ11G04M	ABCD................
S	306	87-A90-095-080	0E	SW,TACT EVQ11G04M	ABCD................
S	301	87-A90-095-080	0E	SW,TACT EVQ11G04M	ABCD................
S	302	87-A90-095-080	0E	SW,TACT EVQ11G04M	ABCD................
S	304	87-A90-095-080	0E	SW,TACT EVQ11G04M	ABCD................
S	308	87-A90-095-080	0E	SW,TACT EVQ11G04M	ABCD................
S	314	87-A90-095-080	0E	SW,TACT EVQ11G04M	ABCD................
S	319	87-A90-095-080	0E	SW,TACT EVQ11G04M	ABCD................
S	311	87-A90-095-080	0E	SW,TACT EVQ11G04M	ABCD................
S	317	87-A90-095-080	0E	SW,TACT EVQ11G04M	ABCD................
S	318	87-A90-095-080	0E	SW,TACT EVQ11G04M	ABCD................
S	310	87-A90-095-080	0E	SW,TACT EVQ11G04M	ABCD................
S	313	87-A90-095-080	0E	SW,TACT EVQ11G04M	ABCD................
S	315	87-A90-095-080	0E	SW,TACT EVQ11G04M	ABCD................
S	312	87-A90-095-080	0E	SW,TACT EVQ11G04M	ABCD................
S	351	87-A90-386-010	1B	SW,RTRY EC16B24204 E	ABCD................
S	352	87-A91-383-010		SW,RTRY EC16B24104-W NUT	ABCD................
X	301	87-030-375-080	1A	VIB,CF 4.19MG200	ABCD................
		8Z-CL6-228-010		HLDR,DIODE	ABCD................
C	104	87-010-197-080	0E	CAP, CHIP 0.01 DM	ABCD................
C	108	87-010-381-080	0E	CAP, ELECT 330-16V	ABCD................
C	107	87-010-384-080	0E	CAP, ELECT 100-25V	ABCD................
C	102	87-010-398-090	1B	CAP,E 2200-35V	ABCD................
C	101	87-010-399-090	1B	CAP,E 3300-35 SME	ABCD................
C	106	87-010-408-080	0E	CAP, ELECT 47-50V	ABCD................
C	105	87-012-140-080	0E	CAP 470P	ABCD................
C	114	87-010-374-080	0E	CAP, ELECT 47-10V	ABCD................
C	113	87-010-403-080	0E	CAP, ELECT 3.3-50V	ABCD................
C	115	87-A10-712-080	0E	C-CAP,S 0.22-50 Z F	ABCD................
C	116	87-A10-712-080	0E	C-CAP,S 0.22-50 Z F	ABCD................
C	133	87-012-368-080	0E	C-CAP,S 0.1-50 F	ABCD................
C	134	87-012-368-080	0E	C-CAP,S 0.1-50 F	ABCD................
C	132	87-A10-712-080	0E	C-CAP,S 0.22-50 Z F	ABCD................
C	131	87-A10-712-080	0E	C-CAP,S 0.22-50 Z F	ABCD................
C	141	87-A10-011-090	2A	CAP,E 2200-25 SMG	ABCD................
C	142	87-A10-011-090	2A	CAP,E 2200-25 SMG	ABCD................
C	152	87-010-178-080	0E	CHIP CAP 1000P	....
C	151	87-010-178-080	0E	CHIP CAP 1000P	ABCD................
D	107	87-020-465-080	0E	DIODE,1SS133 (110MA)	ABCD................
D	104	87-070-022-010	0E	DIODE,IN5402 (RECT)	ABCD................
D	103	87-070-022-010	0E	DIODE,IN5402 (RECT)	ABCD................
D	102	87-070-022-010	0E	DIODE,IN5402 (RECT)	ABCD................
D	101	87-070-022-010	0E	DIODE,IN5402 (RECT)	ABCD................
D	110	87-A40-345-080	0E	ZENER,MTZJ10C	ABCD................
D	111	87-A40-455-080	0E	DIODE,RL203 GW	ABCD................
D	113	87-A40-455-080	0E	DIODE,RL203 GW	ABCD................
D	112	87-A40-455-090	0E	DIODE,RL203 GW	ABCD................
D	114	87-A40-455-090	0E	DIODE,RL203 GW	ABCD................
D	171	87-020-465-080	0E	DIODE,1SS133 (110MA)	ABCD................
PR	201	87-A90-070-080	1A	PROTECTOR,3.5A 251	....
PR	202	87-A90-070-080	1A	PROTECTOR,3.5A 251	....
PR	202	87-A90-473-080	0E	PROTECTOR,3.5A 491SERIES 60V	ABCD................
PR	201	87-A90-473-080	0E	PROTECTOR,3.5A 491SERIES 60V	ABCD................
Q	106	87-A30-076-080	0E	C-TR,2SC3052F	ABCD................
Q	107	87-A30-076-080	0E	C-TR,2SC3052F	ABCD................
Q	109	87-A30-076-080	0E	C-TR,2SC3052F	ABCD................
Q	104	87-A30-196-080	0E	TR,2SC4115SRS	ABCD................
Q	102	89-333-317-080	0E	TR,2SC3331 (0.5W)	ABCD................
Q	115	87-026-211-080	0E	TR,DTA144EK	ABCD................
Q	110	87-A30-075-080	0E	C-TR,2SA1235F	ABCD................
Q	112	87-A30-076-080	0E	C-TR,2SC3052F	ABCD................
W	101	8Z-CL6-642-010		CONN ASSY,11P ZCL6	ABCD................
WH	101	87-A91-179-010	0E	HLDR,WIRE 2.5-11P	ABCD................
C	303	87-010-177-080	0E	C-CAP,S 820P-50 SL	ABCD................
C	304	87-010-177-080	0E	C-CAP,S 820P-50 SL	ABCD................
C	307	87-010-263-080	0E	CAP, ELECT 100-10V	ABCD................
C	308	87-010-263-080	0E	CAP, ELECT 100-10V	ABCD................
C	314	87-010-186-080	0E	CAP,CHIP 4700P	ABCD................
C	313	87-010-186-080	0E	CAP,CHIP 4700P	ABCD................
C	312	87-010-195-080	0E	C-CAP,S 0.068-25 F	ABCD................
C	311	87-010-195-080	0E	C-CAP,S 0.068-25 F	ABCD................
C	315	87-010-374-080	0E	CAP, ELECT 47-10V	ABCD................
C	318	87-010-546-080	0E	CAP, ELECT 0.33-50V	ABCD................
C	317	87-010-546-080	0E	CAP, ELECT 0.33-50V	ABCD................
C	321	87-010-405-080	0E	CAP, ELECT 10-50V	ABCD................
C	340	87-010-197-080	0E	CAP, CHIP 0.01 DM	.BCD................
C	349	87-010-322-080	0E	C-CAP,S 100P-50 CH	.BCD................
C	350	87-010-322-080	0E	C-CAP,S 100P-50 CH	.BCD................
C	361	87-010-374-080	0E	CAP, ELECT 47-10V	ABCD................
C	362	87-010-401-080	0E	CAP, ELECT 1-50V	ABCD................
C	381	87-010-178-080	0E	CHIP CAP 1000P	.BCD................
C	386	87-010-197-080	0E	CAP, CHIP 0.01 DM	.BCD................
C	384	87-012-156-080	0E	C-CAP,S 220P-50 CH	ABCD................
C	393	87-010-178-080	0E	CHIP CAP 1000P	.BCD................
C	406	87-010-188-080	0E	CAP,CHIP 6800P	ABCD................
C	405	87-010-188-080	0E	CAP,CHIP 6800P	ABCD................
C	403	87-010-321-080	0E	CHIP CAPACITOR,82P(J)	ABCD................
C	404	87-010-321-080	0E	CHIP CAPACITOR,82P(J)	ABCD................
C	401	87-010-401-080	0E	CAP, ELECT 1-50V	ABCD................

ELECTRICAL MAIN PARTS LIST - 3/8

C	402	87-010-401-080	0E	CAP, ELECT 1-50V	ABCD................
C	407	87-010-426-080	0E	C-CAP,S 0.012-25 B	ABCD................
C	408	87-010-426-080	0E	C-CAP,S 0.012-25 B	ABCD................
C	459	87-010-175-080	0E	CAP 560P	ABCD................
C	458	87-010-178-080	0E	CHIP CAP 1000P	ABCD................
C	453	87-010-183-080	0E	C-CAP,S 2700P-50 B	ABCD................
C	454	87-010-183-080	0E	C-CAP,S 2700P-50 B	ABCD................
C	455	87-010-183-080	0E	C-CAP,S 2700P-50 B	ABCD................
C	456	87-010-197-080	0E	CAP, CHIP 0.01 DM	ABCD................
C	451	87-010-198-080	0E	CAP, CHIP 0.022	ABCD................
C	452	87-010-382-080	0E	CAP, ELECT 22-25V	ABCD................
C	461	87-012-158-080	0E	C-CAP,S 390P-50 CH	ABCD................
C	462	87-012-158-080	0E	C-CAP,S 390P-50 CH	ABCD................
CN	351	87-A60-624-010	0E	CONN,7P V 2MM JMT	ABCD................
D	311	87-020-465-080	0E	DIODE,1SS133 (110MA)	ABCD................
IC	301	87-017-889-010	1A	IC,NJM4558LD	ABCD................
IC	401	87-017-889-010	1A	IC,NJM4558LD	ABCD................
L	451	87-007-342-010	0E	COIL,OSC 85K BIAS	ABCD................
Q	306	87-026-211-080	0E	TR,DTA144EK	ABCD................
Q	305	87-A30-087-080	0E	C-FET,2SK2158	ABCD................
Q	307	87-A30-087-080	0E	C-FET,2SK2158	ABCD................
Q	308	87-A30-087-080	0E	C-FET,2SK2158	ABCD................
Q	309	87-A30-197-080	0E	TR,KTA1267GR	ABCD................
Q	313	87-026-218-080	0E	TR,DTC144ES (0.2W)	ABCD................
Q	314	87-026-218-080	0E	TR,DTC144ES (0.2W)	ABCD................
Q	310	87-A30-197-080	0E	TR,KTA1267GR	ABCD................
Q	441	87-A30-075-080	0E	C-TR,2SA1235F	ABCD................
Q	442	87-A30-075-080	0E	C-TR,2SA1235F	ABCD................
Q	452	87-026-610-080	0E	TR,KTC3198GR	.BCD................
Q	454	89-333-317-080	0E	TR,2SC3331 (0.5W)	ABCD................
Q	453	89-333-317-080	0E	TR,2SC3331 (0.5W)	ABCD................
Q	451	89-333-317-080	0E	TR,2SC3331 (0.5W)	ABCD................
C	602	87-010-180-080	0E	C-CER 1500P	ABCD................
C	601	87-010-180-080	0E	C-CER 1500P	ABCD................
C	609	87-010-213-080	0E	C-CAP,S 0.015-50 B	ABCD................
C	615	87-010-154-080	0E	CAP CHIP 10P	ABCD................
C	610	87-010-213-080	0E	C-CAP,S 0.015-50 B	ABCD................
C	619	87-010-402-080	0E	CAP, ELECT 2.2-50V	ABCD................
C	617	87-010-408-080	0E	CAP, ELECT 47-50V	ABCD................
C	616	87-010-408-080	0E	CAP, ELECT 47-50V	ABCD................
C	612	87-010-545-080	0E	CAP, ELECT 0.22-50V	ABCD................
C	611	87-010-545-080	0E	CAP, ELECT 0.22-50V	ABCD................
C	613	87-010-545-080	0E	CAP, ELECT 0.22-50V	ABCD................
C	614	87-010-545-080	0E	CAP, ELECT 0.22-50V	ABCD................
C	620	87-010-402-080	0E	CAP, ELECT 2.2-50V	ABCD................
C	625	87-010-405-080	0E	CAP, ELECT 10-50V	ABCD................
C	626	87-010-405-080	0E	CAP, ELECT 10-50V	ABCD................
C	661	87-010-178-080	0E	CHIP CAP 1000P	.BCD................
C	690	87-010-263-080	0E	CAP, ELECT 100-10V	ABCD................
CN	202	87-099-719-010	1B	CONN,30P TYK-B(X)	ABCD................
CN	671	87-099-210-010	0E	CONN,5P 6216 H	ABCD................
D	605	87-020-465-080	0E	DIODE,1SS133 (110MA)	ABCD................
D	604	87-020-465-080	0E	DIODE,1SS133 (110MA)	ABCD................
D	603	87-020-465-080	0E	DIODE,1SS133 (110MA)	..CD................
D	601	87-A40-466-080	0E	ZENER,MTZJ2.7A	ABCD................
D	602	87-A40-466-080	0E	ZENER,MTZJ2.7A	ABCD................
IC	601	87-A21-111-040	1C	C-IC,M62495FP	ABCD................
PR	601	87-026-689-080	0E	PROTECTOR,1A 60V 491	ABCD................
PR	601	87-A91-153-080	0E	FUSE,630MA 125V 251	....
Q	602	87-026-210-080	0E	CHIP-TR,DTC144EK	ABCD................
Q	601	87-026-210-080	0E	CHIP-TR,DTC144EK	ABCD................
Q	603	87-026-210-080	0E	CHIP-TR,DTC144EK	ABCD................
Q	607	87-A30-257-080	0E	C-TR,2SD1306E	ABCD................
Q	608	87-A30-257-080	0E	C-TR,2SD1306E	ABCD................
Q	605	87-A30-257-080	0E	C-TR,2SD1306E	ABCD................
Q	606	87-A30-257-080	0E	C-TR,2SD1306E	ABCD................
Q	609	87-A30-257-080	0E	C-TR,2SD1306E	ABCD................
Q	613	87-026-239-080	0E	TR,DTC114TK (0.2W)	ABCD................
Q	614	87-026-239-080	0E	TR,DTC114TK (0.2W)	ABCD................
Q	615	87-A30-075-080	0E	C-TR,2SA1235F	ABCD................
Q	610	87-A30-257-080	0E	C-TR,2SD1306E	ABCD................
Q	612	87-A30-257-080	0E	C-TR,2SD1306E	ABCD................
Q	611	87-A30-257-080	0E	C-TR,2SD1306E	ABCD................
JW	632	87-A90-896-080	0E	F-BEAD, 035600STY7	.BCD................
C	812	87-012-286-080	0E	CAP, U 0.01-25	ABCD................
C	814	87-012-286-080	0E	CAP, U 0.01-25	.BCD................
C	828	87-010-196-080	0E	CHIP CAPACITOR,0.1-25	ABCD................
C	829	87-010-196-080	0E	CHIP CAPACITOR,0.1-25	ABCD................
C	820	87-010-260-080	0E	CAP, ELECT 47-25V	ABCD................
C	822	87-012-286-080	0E	CAP, U 0.01-25	ABCD................
C	823	87-012-286-080	0E	CAP, U 0.01-25	ABCD................
C	821	87-012-286-080	0E	CAP, U 0.01-25	ABCD................
C	909	87-012-286-080	0E	CAP, U 0.01-25	.BCD................
C	910	87-012-286-080	0E	CAP, U 0.01-25	.BCD................
C	942	87-012-172-080	0E	CAPACITOR CHIP U 10P CH	.BCD................
C	940	87-012-286-080	0E	CAP, U 0.01-25	.BCD................
C	947	87-012-286-080	0E	CAP, U 0.01-25	.BCD................
C	949	87-A10-039-080	0E	C-CAP,U 470P-50 J CH	.BCD................
C	958	87-010-197-080	0E	CAP, CHIP 0.01 DM	.BCD................
C	959	87-010-831-080	0E	C-CAP,U,0.1-16F	ABCD................
C	952	87-012-286-080	0E	CAP, U 0.01-25	.BCD................
C	963	87-010-196-080	0E	CHIP CAPACITOR,0.1-25	A...................

ELECTRICAL MAIN PARTS LIST - 4/8

C	960	87-010-196-080	0E	CHIP CAPACITOR,0.1-25	ABCD................
C	962	87-010-401-080	0E	CAP, ELECT 1-50V	.BCD................
C	961	87-012-170-080	0E	C-CAP,U 8P-50 CH	A...................
CF	802	82-785-747-010	1A	CF MS2 GHY R	.BCD................
CF	802	87-008-261-010	1A	FILTER, SFE10.7MA5-A	A...................
CF	801	87-008-261-010	1A	FILTER, SFE10.7MA5-A	A...................
CF	801	87-008-423-010	1A	CERAMIC FILTER, SFE10.7	.BCD................
D	944	87-020-465-080	0E	DIODE,1SS133 (110MA)	.BCD................
D	942	87-A40-270-080	0E	C-DIODE,MC2838	.BCD................
FFE	801	A8-6ZA-19C-170	2A	6ZA-1 YFEENC	.BCD................
FFE	801	A8-6ZA-19D-070	1H	6ZA-1 YFEJNC	....
FFE	801	A8-8ZA-193-070	1E	8ZA-1 YFEUNC	A...................
J	801	87-A60-202-010	1A	TERMINAL,ANT 4P MSP-154V-02	A...................
J	801	87-A60-880-010	1A	TERMINAL,ANT-PAL 2P MSP-313V-0	.BCD................
L	832	87-005-847-080	0E	COIL,2.2UH(CECS)	.BCD................
L	942	87-A50-019-010	0E	COIL,OSC LW(COI)	.BCD................
L	941	87-A50-020-010	0E	COIL,ANT LW(COI)	.BCD................
L	981	87-NF4-650-010	1D	COIL,AM PACK 4N(TOK)	A...................
L	981	87-NF4-651-110	1C	COIL,AM PACK2N(TOM)	.BCD................
Q	806	87-A30-072-080	0E	C-TR,RT1P 144C	ABCD................
Q	805	89-327-143-080	0E	TR,2SC2714 (0.1W)	ABCD................
Q	948	87-A30-257-080	0E	C-TR,2SD1306E	.BCD................
Q	947	89-505-434-540	0E	C-FET,2SK543(4/5)	.BCD................
Q	951	87-A30-074-080	0E	C-TR,RT1P 141C	.BCD................
Q	952	87-A30-257-080	0E	C-TR,2SD1306E	.BCD................
TC	942	87-011-164-010	0E	CAPACITOR,TRIMMER 30P	.BCD................
C	731	87-012-286-080	0E	CAP, U 0.01-25	ABCD................
C	758	87-012-167-080	0E	C-CAP,U 5P-50 CH	ABCD................
C	757	87-012-188-080	0E	C-CAP,U 47P-50 CH	ABCD................
C	753	87-012-195-080	0E	C-CAP,U 100P-50CH	.BCD................
C	752	87-012-282-080	0E	CAP, U 4700P-50	.BCD................
C	755	87-012-286-080	0E	CAP, U 0.01-25	.BCD................
C	756	87-012-286-080	0E	CAP, U 0.01-25	ABCD................
C	761	87-010-196-080	0E	CHIP CAPACITOR,0.1-25	.BCD................
C	766	87-010-197-080	0E	CAP, CHIP 0.01 DM	.BCD................
C	769	87-010-260-080	0E	CAP, ELECT 47-25V	ABCD................
C	763	87-010-829-080	0E	CAP, U 0.047-16	ABCD................
C	768	87-012-286-080	0E	CAP, U 0.01-25	ABCD................
C	762	87-012-286-080	0E	CAP, U 0.01-25	.BCD................
C	765	87-012-286-080	0E	CAP, U 0.01-25	ABCD................
C	764	87-012-337-080	0E	C-CAP,U 56P-50 CH	A...................
C	773	87-010-196-080	0E	CHIP CAPACITOR,0.1-25	ABCD................
C	774	87-010-263-080	0E	CAP, ELECT 100-10V	ABCD................
C	771	87-010-383-080	0E	CAP, ELECT 33-25V	ABCD................
C	770	87-010-829-080	0E	CAP, U 0.047-16	ABCD................
C	772	87-010-829-080	0E	CAP, U 0.047-16	ABCD................
C	776	87-012-286-080	0E	CAP, U 0.01-25	ABCD................
C	775	87-015-688-080	0E	CAP,E 4.7-35 7L	ABCD................
C	777	87-015-694-080	0E	CAP,E 0.47-50 7L	ABCD................
C	778	87-015-695-080	0E	CAP,E 1-50 7L	ABCD................
C	779	87-015-695-080	0E	CAP,E 1-50 7L	ABCD................
C	780	87-010-196-080	0E	CHIP CAPACITOR,0.1-25	ABCD................
C	787	87-010-213-080	0E	C-CAP,S 0.015-50 B	.BCD................
C	788	87-010-213-080	0E	C-CAP,S 0.015-50 B	.BCD................
C	785	87-010-401-080	0E	CAP, ELECT 1-50V	A...................
C	786	87-010-401-080	0E	CAP, ELECT 1-50V	A...................
C	781	87-010-405-080	0E	CAP, ELECT 10-50V	ABCD................
C	786	87-010-405-080	0E	CAP, ELECT 10-50V	.BCD................
C	782	87-010-405-080	0E	CAP, ELECT 10-50V	ABCD................
C	785	87-010-405-080	0E	CAP, ELECT 10-50V	.BCD................
C	789	87-012-275-080	0E	C-CAP,U 1200P-50 B	ABCD................
C	784	87-012-286-080	0E	CAP, U 0.01-25	ABCD................
C	783	87-012-286-080	0E	CAP, U 0.01-25	ABCD................
C	796	87-010-403-080	0E	CAP, ELECT 3.3-50V	ABCD................
C	791	87-010-405-080	0E	CAP, ELECT 10-50V	ABCD................
C	794	87-010-406-080	0E	CAP, ELECT 22-50	ABCD................
C	795	87-010-596-080	0E	CAP, S 0.047-16	ABCD................
C	799	87-010-829-080	0E	CAP, U 0.047-16	ABCD................
C	793	87-012-273-080	0E	C-CAP,U 820P-50 B	A...................
C	790	87-012-275-080	0E	C-CAP,U 1200P-50 B	ABCD................
C	798	87-012-276-080	0E	CAP, CHIP SS 1500 PBK	ABCD................
C	797	87-012-276-080	0E	CAP, CHIP SS 1500 PBK	ABCD................
C	798	87-012-278-080	0E	C-CAP,U 2200P-50 B	....
C	797	87-012-278-080	0E	C-CAP,U 2200P-50 B	....
C	793	87-A10-915-080	0E	C-CAP,U 1000P-25 J CH	.BCD................
D	771	87-020-465-080	0E	DIODE,1SS133 (110MA)	.BCD................
D	773	87-020-465-080	0E	DIODE,1SS133 (110MA)	ABCD................
IC	771	87-A20-913-010	1D	IC,LA1837NL	ABCD................
L	771	87-A50-266-010	1A	COIL,FM DET-2N(TOK)	ABCD................
L	772	88-CL4-692-010		FLTR,APCFMP-450 (TOK)	....
L	772	88-CL4-693-010	1A	FLTR,PCFAYH-450 (TOK)	ABCD................
L	781	87-005-847-080	0E	COIL,2.2UH(CECS)	.BCD................
C	701	87-010-381-080	0E	CAP, ELECT 330-16V	ABCD................
C	702	87-010-404-080	0E	CAP, ELECT 4.7-50V	ABCD................
C	709	87-012-195-080	0E	C-CAP,U 100P-50CH	ABCD................
C	703	87-012-286-080	0E	CAP, U 0.01-25	ABCD................
C	704	87-012-286-080	0E	CAP, U 0.01-25	ABCD................
C	712	87-010-196-080	0E	CHIP CAPACITOR,0.1-25	A...................
C	711	87-010-263-080	0E	CAP, ELECT 100-10V	ABCD................
C	712	87-010-831-080	0E	C-CAP,U,0.1-16F	.BCD................
C	715	87-012-195-080	0E	C-CAP,U 100P-50CH	.BCD................
C	719	87-012-286-080	0E	CAP, U 0.01-25	ABCD................

ELECTRICAL MAIN PARTS LIST - 5/8

C	713	87-012-286-080	0E	CAP, U 0.01-25	.BCD................
C	717	87-012-286-080	0E	CAP, U 0.01-25	ABCD................
C	714	87-012-286-080	0E	CAP, U 0.01-25	ABCD................
C	727	87-010-196-080	0E	CHIP CAPACITOR,0.1-25	ABCD................
C	728	87-010-248-080	0E	CAP, ELECT 220-10V	ABCD................
C	721	87-012-176-080	0E	CAP 15P	ABCD................
C	722	87-012-176-080	0E	CAP 15P	ABCD................
C	720	87-012-195-080	0E	C-CAP,U 100P-50CH	ABCD................
C	723	87-012-274-080	0E	CHIP CAP,U 1000P-50B	ABCD................
C	725	87-012-274-080	0E	CHIP CAP,U 1000P-50B	A...................
C	729	87-012-274-080	0E	CHIP CAP,U 1000P-50B	ABCD................
C	725	87-018-131-080	0E	CAP, CER 1000P-50V	.BCD................
D	722	87-020-465-080	0E	DIODE,1SS133 (110MA)	.BCD................
D	724	87-020-465-080	0E	DIODE,1SS133 (110MA)	ABCD................
D	721	87-A40-234-080	0E	ZENER,MTZJ5.6A	ABCD................
IC	721	87-070-127-110	1C	IC,LC72131 D	ABCD................
Q	711	87-A30-196-080	0E	TR,2SC4115SRS	ABCD................
X	721	87-A70-061-010	1A	VIB,XTAL 4.500MHZ CSA-309	ABCD................
C	872	87-010-400-080	0E	CAP, ELECT 0.47-50V	....
C	873	87-010-404-080	0E	CAP, ELECT 4.7-50V	....
C	878	87-012-278-080	0E	C-CAP,U 2200P-50 B	....
C	877	87-012-278-080	0E	C-CAP,U 2200P-50 B	....
C	889	87-010-248-080	0E	CAP, ELECT 220-10V	....
C	884	87-010-260-080	0E	CAP, ELECT 47-25V	....
C	883	87-010-404-080	0E	CAP, ELECT 4.7-50V	....
C	885	87-010-545-080	0E	CAP, ELECT 0.22-50V	....
C	886	87-010-545-080	0E	CAP, ELECT 0.22-50V	....
C	888	87-010-787-080	0E	CAP, U 0.022-25	....
C	881	87-012-141-080	0E	CHIP-CAPACITOR,0.22-16F	....
C	882	87-012-172-080	0E	CAPACITOR CHIP U 10P CH	....
C	887	87-012-286-080	0E	CAP, U 0.01-25	....
D	886	87-020-465-080	0E	DIODE,1SS133 (110MA)	....
IC	871	87-070-060-040	1F	IC,TA2040AF	....
Q	873	87-026-226-080	0E	CHIP-TR,DTA143EK	....
X	891	87-030-394-010	1B	VIB,CER CSA3.6MGF228	....
C	859	87-012-286-080	0E	CAP, U 0.01-25	..CD................
C	865	87-010-196-080	0E	CHIP CAPACITOR,0.1-25	..CD................
C	864	87-010-405-080	0E	CAP, ELECT 10-50V	..CD................
C	866	87-010-405-080	0E	CAP, ELECT 10-50V	..CD................
C	869	87-012-180-080	0E	C-CAP,U 22P-50 CH	..CD................
C	868	87-012-184-080	0E	C-CAP,U 33P-50 CH	..CD................
C	861	87-012-199-080	0E	CAP 220P	..CD................
C	862	87-012-199-080	0E	CAP 220P	..CD................
C	863	87-012-270-080	0E	CAP, U 470P-50	..CD................
C	867	87-012-286-080	0E	CAP, U 0.01-25	..CD................
IC	851	87-A20-440-040	1H	C-IC,BU1920FS	..CD................
L	851	87-005-847-080	0E	COIL,2.2UH(CECS)	..CD................
Q	853	87-A30-076-080	0E	C-TR,2SC3052F	..CD................
X	851	87-A70-091-010	1B	VIB,XTAL 4.332MHZ CSA-309	..CD................
C	204	87-010-187-080	0E	CAP CHIP S5600P	ABCD................
C	203	87-010-187-080	0E	CAP CHIP S5600P	ABCD................
C	209	87-010-546-080	0E	CAP, ELECT 0.33-50V	ABCD................
C	219	87-010-196-080	0E	CHIP CAPACITOR,0.1-25	ABCD................
C	214	87-010-260-080	0E	CAP, ELECT 47-25V	ABCD................
C	213	87-010-260-080	0E	CAP, ELECT 47-25V	ABCD................
C	212	87-010-403-080	0E	CAP, ELECT 3.3-50V	ABCD................
C	211	87-010-403-080	0E	CAP, ELECT 3.3-50V	ABCD................
C	210	87-010-546-080	0E	CAP, ELECT 0.33-50V	ABCD................
C	218	87-010-993-080	0E	C-CAP,S 0.056-25 B	ABCD................
C	217	87-010-993-080	0E	C-CAP,S 0.056-25 B	ABCD................
C	224	87-010-186-080	0E	CAP,CHIP 4700P	ABCD................
C	223	87-010-186-080	0E	CAP,CHIP 4700P	ABCD................
C	222	87-010-187-080	0E	CAP CHIP S5600P	.BCD................
C	221	87-010-187-080	0E	CAP CHIP S5600P	.BCD................
C	220	87-010-196-080	0E	CHIP CAPACITOR,0.1-25	ABCD................
C	225	87-010-322-080	0E	C-CAP,S 100P-50 CH	ABCD................
C	226	87-010-322-080	0E	C-CAP,S 100P-50 CH	ABCD................
C	229	87-A10-946-080	0E	C-CAP,S 220P-100 J CH	ABCD................
C	231	87-010-260-080	0E	CAP, ELECT 47-25V	ABCD................
C	233	87-010-263-080	0E	CAP, ELECT 100-10V	ABCD................
C	234	87-010-380-080	0E	CAP, ELECT 47-16V	ABCD................
C	232	87-010-401-080	0E	CAP, ELECT 1-50V	ABCD................
C	230	87-A10-946-080	0E	C-CAP,S 220P-100 J CH	ABCD................
C	262	87-010-197-080	0E	CAP, CHIP 0.01 DM	ABCD................
C	276	87-010-178-080	0E	CHIP CAP 1000P	.BCD................
C	274	87-010-322-080	0E	C-CAP,S 100P-50 CH	.BCD................
C	275	87-010-322-080	0E	C-CAP,S 100P-50 CH	.BCD................
C	288	87-010-196-080	0E	CHIP CAPACITOR,0.1-25	ABCD................
C	287	87-010-196-080	0E	CHIP CAPACITOR,0.1-25	ABCD................
C	286	87-010-400-080	0E	CAP, ELECT 0.47-50V	ABCD................
C	285	87-010-400-080	0E	CAP, ELECT 0.47-50V	ABCD................
CN	201	87-A60-619-010	0E	CONN,2P V 2MM JMT	ABCD................
D	202	87-020-465-080	0E	DIODE,1SS133 (110MA)	ABCD................
D	207	87-020-465-080	0E	DIODE,1SS133 (110MA)	ABCD................
D	201	87-020-465-080	0E	DIODE,1SS133 (110MA)	ABCD................
D	208	87-020-465-080	0E	DIODE,1SS133 (110MA)	ABCD................
D	204	87-020-465-080	0E	DIODE,1SS133 (110MA)	ABCD................
D	209	87-020-465-080	0E	DIODE,1SS133 (110MA)	ABCD................
D	206	87-020-465-080	0E	DIODE,1SS133 (110MA)	ABCD................
D	205	87-020-465-080	0E	DIODE,1SS133 (110MA)	ABCD................
D	203	87-020-465-080	0E	DIODE,1SS133 (110MA)	ABCD................
D	210	87-020-465-080	0E	DIODE,1SS133 (110MA)	ABCD................

ELECTRICAL MAIN PARTS LIST - 6/8

D	262	87-020-465-080	0E	DIODE,1SS133 (110MA)	ABCD................
D	261	87-020-465-080	0E	DIODE,1SS133 (110MA)	ABCD................
J	241	87-A60-217-010	1A	TERMINAL,SPKR 4P	ABCD................
J	601	87-A60-926-010	1A	JACK,PIN 4P R/W TC58-118	ABCD................
L	201	87-005-366-010	1A	COIL, 1UH	ABCD................
L	202	87-005-366-010	1A	COIL, 1UH	ABCD................
Q	201	87-A30-075-080	0E	C-TR,2SA1235F	ABCD................
Q	202	87-A30-075-080	0E	C-TR,2SA1235F	ABCD................
Q	203	87-A30-075-080	0E	C-TR,2SA1235F	ABCD................
Q	204	87-A30-075-080	0E	C-TR,2SA1235F	ABCD................
Q	207	87-A30-076-080	0E	C-TR,2SC3052F	ABCD................
Q	208	87-A30-076-080	0E	C-TR,2SC3052F	ABCD................
Q	205	87-A30-076-080	0E	C-TR,2SC3052F	ABCD................
Q	206	87-A30-076-080	0E	C-TR,2SC3052F	ABCD................
Q	209	89-333-317-080	0E	TR,2SC3331 (0.5W)	ABCD................
Q	215	87-A30-076-080	0E	C-TR,2SC3052F	ABCD................
Q	216	87-A30-076-080	0E	C-TR,2SC3052F	ABCD................
Q	210	89-333-317-080	0E	TR,2SC3331 (0.5W)	ABCD................
Q	220	87-026-219-080	0E	TR,DTA144ES (0.3W)	ABCD................
Q	231	87-026-609-080	0E	TR,KTA1266GR	ABCD................
Q	230	87-A30-076-080	0E	C-TR,2SC3052F	ABCD................
Q	241	87-A30-074-080	0E	C-TR,RT1P 141C	ABCD................
Q	240	87-A30-268-040	0E	C-TR,2SA1514K(S)	ABCD................
Q	260	87-A30-075-080	0E	C-TR,2SA1235F	ABCD................
Q	261	87-A30-257-080	0E	C-TR,2SD1306E	ABCD................
Q	262	87-A30-257-080	0E	C-TR,2SD1306E	ABCD................
R	223	87-A00-258-080	0E	RES,M/F 0.22-1W J	ABCD................
R	224	87-A00-258-080	0E	RES,M/F 0.22-1W J	ABCD................
R	249	87-A00-258-080	0E	RES,M/F 0.22-1W J	ABCD................
R	250	87-A00-258-080	0E	RES,M/F 0.22-1W J	ABCD................
TH	202	87-A91-042-080	0E	C-THMS,100K 55001	ABCD................
TH	201	87-A91-042-080	0E	C-THMS,100K 55001	ABCD................
C	507	87-010-402-080	0E	CAP, ELECT 2.2-50V	ABCD................
C	508	87-010-402-080	0E	CAP, ELECT 2.2-50V	ABCD................
C	505	87-010-403-080	0E	CAP, ELECT 3.3-50V	ABCD................
C	506	87-010-403-080	0E	CAP, ELECT 3.3-50V	ABCD................
C	514	87-010-184-080	0E	CHIP CAPACITOR 3300P(K)	ABCD................
C	513	87-010-184-080	0E	CHIP CAPACITOR 3300P(K)	ABCD................
C	519	87-010-260-080	0E	CAP, ELECT 47-25V	ABCD................
C	520	87-010-260-080	0E	CAP, ELECT 47-25V	ABCD................
C	527	87-012-153-080	0E	C-CAP,S 120P-50 CH	ABCD................
C	528	87-012-153-080	0E	C-CAP,S 120P-50 CH	ABCD................
C	522	87-012-156-080	0E	C-CAP,S 220P-50 CH	ABCD................
C	521	87-012-156-080	0E	C-CAP,S 220P-50 CH	ABCD................
C	533	87-010-196-080	0E	CHIP CAPACITOR,0.1-25	ABCD................
C	534	87-010-196-080	0E	CHIP CAPACITOR,0.1-25	ABCD................
C	532	87-010-993-080	0E	C-CAP,S 0.056-25 B	ABCD................
C	531	87-010-993-080	0E	C-CAP,S 0.056-25 B	ABCD................
C	561	87-010-196-080	0E	CHIP CAPACITOR,0.1-25	ABCD................
C	562	87-010-196-080	0E	CHIP CAPACITOR,0.1-25	ABCD................
C	584	87-010-184-080	0E	CHIP CAPACITOR 3300P(K)	ABCD................
C	583	87-010-184-080	0E	CHIP CAPACITOR 3300P(K)	ABCD................
C	582	87-010-193-080	0E	CHIP CAPACITOR,0.033	ABCD................
C	581	87-010-193-080	0E	CHIP CAPACITOR,0.033	ABCD................
C	585	87-010-546-080	0E	CAP, ELECT 0.33-50V	ABCD................
C	586	87-010-546-080	0E	CAP, ELECT 0.33-50V	ABCD................
D	505	87-020-465-080	0E	DIODE,1SS133 (110MA)	ABCD................
D	506	87-020-465-080	0E	DIODE,1SS133 (110MA)	ABCD................
D	502	87-020-465-080	0E	DIODE,1SS133 (110MA)	ABCD................
D	507	87-020-465-080	0E	DIODE,1SS133 (110MA)	ABCD................
D	504	87-020-465-080	0E	DIODE,1SS133 (110MA)	ABCD................
D	503	87-020-465-080	0E	DIODE,1SS133 (110MA)	ABCD................
D	501	87-020-465-080	0E	DIODE,1SS133 (110MA)	ABCD................
D	508	87-020-465-080	0E	DIODE,1SS133 (110MA)	ABCD................
J	501	87-A60-926-010	1A	JACK,PIN 4P R/W TC58-118	ABCD................
L	551	87-005-366-010	1A	COIL, 1UH	ABCD................
L	552	87-005-366-010	1A	COIL, 1UH	ABCD................
Q	501	87-A30-257-080	0E	C-TR,2SD1306E	ABCD................
Q	502	87-A30-257-080	0E	C-TR,2SD1306E	ABCD................
Q	511	87-A30-075-080	0E	C-TR,2SA1235F	ABCD................
Q	512	87-A30-075-080	0E	C-TR,2SA1235F	ABCD................
Q	513	87-A30-075-080	0E	C-TR,2SA1235F	ABCD................
Q	514	87-A30-075-080	0E	C-TR,2SA1235F	ABCD................
Q	518	87-A30-076-080	0E	C-TR,2SC3052F	ABCD................
Q	516	87-A30-076-080	0E	C-TR,2SC3052F	ABCD................
Q	517	87-A30-076-080	0E	C-TR,2SC3052F	ABCD................
Q	515	87-A30-076-080	0E	C-TR,2SC3052F	ABCD................
Q	524	89-333-317-080	0E	TR,2SC3331 (0.5W)	ABCD................
Q	523	89-333-317-080	0E	TR,2SC3331 (0.5W)	ABCD................
Q	535	87-A30-076-080	0E	C-TR,2SC3052F	ABCD................
Q	536	87-A30-076-080	0E	C-TR,2SC3052F	ABCD................
R	535	87-A00-258-080	0E	RES,M/F 0.22-1W J	ABCD................
R	538	87-A00-258-080	0E	RES,M/F 0.22-1W J	ABCD................
R	536	87-A00-258-080	0E	RES,M/F 0.22-1W J	ABCD................
R	537	87-A00-258-080	0E	RES,M/F 0.22-1W J	ABCD................
C	589	87-010-197-080	0E	CAP, CHIP 0.01 DM	ABCD................
C	598	87-010-189-080	0E	C-CAP,S 8200P-50 B	ABCD................
C	597	87-010-189-080	0E	C-CAP,S 8200P-50 B	ABCD................
C	590	87-010-197-080	0E	CAP, CHIP 0.01 DM	ABCD................
C	593	87-010-322-080	0E	C-CAP,S 100P-50 CH	ABCD................
C	594	87-010-322-080	0E	C-CAP,S 100P-50 CH	ABCD................
C	596	87-010-401-080	0E	CAP, ELECT 1-50V	ABCD................

ELECTRICAL MAIN PARTS LIST - 7/8

C	595	87-010-401-080	0E	CAP, ELECT 1-50V	ABCD................
C	592	87-010-401-080	0E	CAP, ELECT 1-50V	ABCD................
C	591	87-010-401-080	0E	CAP, ELECT 1-50V	ABCD................
D	519	87-020-465-080	0E	DIODE,1SS133 (110MA)	ABCD................
IC	580	87-001-596-010	1B	IC,NJM4580L	ABCD................
J	590	87-A60-420-010	1A	JACK,3.5 ST (MSC)	ABCD................
L	591	87-005-366-010	1A	COIL, 1UH	ABCD................
L	592	87-005-366-010	1A	COIL, 1UH	ABCD................
Q	550	87-A30-075-080	0E	C-TR,2SA1235F	ABCD................
Q	551	87-A30-257-080	0E	C-TR,2SD1306E	ABCD................
Q	552	87-A30-257-080	0E	C-TR,2SD1306E	ABCD................
C	109	87-010-260-080	0E	CAP, ELECT 47-25V	ABCD................
C	107	87-010-260-080	0E	CAP, ELECT 47-25V	ABCD................
C	108	87-010-260-080	0E	CAP, ELECT 47-25V	ABCD................
C	101	87-010-387-080	1A	CAP,E 470-25 SME	ABCD................
C	111	87-010-247-080	0E	CAP, ELECT 100-50V	ABCD................
C	110	87-010-260-080	0E	CAP, ELECT 47-25V	ABCD................
C	112	87-010-263-080	0E	CAP, ELECT 100-10V	ABCD................
CN	101	87-099-411-010		CONN,11P V WHT EH	ABCD................
D	104	87-020-465-080	0E	DIODE,1SS133 (110MA)	ABCD................
D	107	87-020-465-080	0E	DIODE,1SS133 (110MA)	ABCD................
D	102	87-020-465-080	0E	DIODE,1SS133 (110MA)	ABCD................
D	108	87-020-465-080	0E	DIODE,1SS133 (110MA)	ABCD................
D	101	87-020-465-080	0E	DIODE,1SS133 (110MA)	ABCD................
D	103	87-020-465-080	0E	DIODE,1SS133 (110MA)	ABCD................
D	105	87-020-465-080	0E	DIODE,1SS133 (110MA)	ABCD................
D	120	87-A40-341-080	0E	ZENER,MTZJ 36 A	ABCD................
D	121	87-A40-553-080	0E	DIODE,1N4003 LES	ABCD................
D	122	87-A40-553-080	0E	DIODE,1N4003 LES	ABCD................
D	123	87-A40-553-080	0E	DIODE,1N4003 LES	ABCD................
D	124	87-A40-553-080	0E	DIODE,1N4003 LES	ABCD................
FC	102	87-033-213-080	0E	CLAMP, FUSE	ABCD................
FC	101	87-033-213-080	0E	CLAMP, FUSE	ABCD................
PR	102	87-026-681-080	0E	PROTECTOR,5A 60V 491	ABCD................
PR	101	87-026-681-080	0E	PROTECTOR,5A 60V 491	ABCD................
PR	101	87-026-690-080	1A	FUSE,5A 125V 251	....
PR	102	87-026-690-080	1A	FUSE,5A 125V 251	....
PR	104	87-A90-070-080	1A	PROTECTOR,3.5A 251	....
PR	103	87-A90-070-080	1A	PROTECTOR,3.5A 251	....
PR	103	87-A90-473-080	0E	PROTECTOR,3.5A 491SERIES 60V	ABCD................
PR	104	87-A90-473-080	0E	PROTECTOR,3.5A 491SERIES 60V	ABCD................
PT	102	8Z-NF8-660-110	1C	PT,SUB ZNF-8(D)	....
PT	102	8Z-NF8-661-010	1D	PT,SUB ZNF-8(U)	....
PT	102	8Z-NF8-662-010	1D	PT,SUB ZNF-8(E)	.BCD................
PT	102	8Z-NF8-663-010	1D	PT,SUB ZNF-8(H)	A...................
Q	101	87-026-610-080	0E	TR,KTC3198GR	ABCD................
Q	105	89-113-184-080	0E	TR,2SA1318T	ABCD................
RY	102	87-A90-976-010	1B	RELAY,AC12V SDT-S-112LMR	.BCD................
RY	102	87-A91-281-010	1B	RELAY,AC DC12V OSA-SS-212DM5	A...................
SW	101	87-A90-234-010	1A	SW,SL 1-2-2 SW2201	A...................
T	101	87-A60-317-010	0E	TERMINAL, 1P MSC	ABCD................
T	102	87-A60-317-010	0E	TERMINAL, 1P MSC	ABCD................
C	7	87-010-178-080	0E	CHIP CAP 1000P	ABCD................
C	2	87-010-197-080	0E	CAP, CHIP 0.01 DM	ABCD................
C	5	87-010-197-080	0E	CAP, CHIP 0.01 DM	ABCD................
C	8	87-010-198-080	0E	CAP, CHIP 0.022	ABCD................
C	9	87-010-263-080	0E	CAP, ELECT 100-10V	ABCD................
C	4	87-010-371-080	0E	CAP, ELECT 470-6.3V	ABCD................
C	6	87-010-374-080	0E	CAP, ELECT 47-10V	ABCD................
C	3	87-010-401-080	0E	CAP, ELECT 1-50V	ABCD................
C	1	87-010-406-080	0E	CAP, ELECT 22-50	ABCD................
C	17	87-010-178-080	0E	CHIP CAP 1000P	ABCD................
C	13	87-010-197-080	0E	CAP, CHIP 0.01 DM	ABCD................
C	18	87-010-213-080	0E	C-CAP,S 0.015-50 B	ABCD................
C	10	87-010-263-080	0E	CAP, ELECT 100-10V	ABCD................
C	12	87-010-401-080	0E	CAP, ELECT 1-50V	ABCD................
C	14	87-010-405-080	0E	CAP, ELECT 10-50V	ABCD................
C	16	87-010-544-080	0E	CAP, ELECT 0.1-50V	ABCD................
C	29	87-010-178-080	0E	CHIP CAP 1000P	ABCD................
C	22	87-010-180-080	0E	C-CER 1500P	ABCD................
C	23	87-010-993-080	0E	C-CAP,S 0.056-25 B	ABCD................
C	24	87-012-155-080	0E	C-CAP 180P-50CH	ABCD................
C	20	87-016-369-080	0E	C-CAP,S 0.033-25 B K	ABCD................
C	21	87-A11-010-080	0E	CAP,M 0.082-50 J DE	ABCD................
C	26	87-A11-014-080	0E	CAP,M 0.22-50 J DE	ABCD................
C	39	87-010-178-080	0E	CHIP CAP 1000P	ABCD................
C	30	87-010-178-080	0E	CHIP CAP 1000P	ABCD................
C	34	87-010-186-080	0E	CAP,CHIP 4700P	ABCD................
C	38	87-010-196-080	0E	CHIP CAPACITOR,0.1-25	ABCD................
C	35	87-010-197-080	0E	CAP, CHIP 0.01 DM	ABCD................
C	36	87-010-374-080	0E	CAP, ELECT 47-10V	ABCD................
C	32	87-010-380-080	0E	CAP, ELECT 47-16V	ABCD................
C	33	87-010-401-080	0E	CAP, ELECT 1-50V	ABCD................
C	31	87-010-402-080	0E	CAP, ELECT 2.2-50V	ABCD................
C	37	87-010-404-080	0E	CAP, ELECT 4.7-50V	ABCD................
C	40	87-010-147-080	0E	C-CAP,S 3P-50 CH	ABCD................
C	44	87-010-176-080	0E	C-CAP,S 680P-50 SL	ABCD................
C	47	87-010-196-080	0E	CHIP CAPACITOR,0.1-25	ABCD................
C	46	87-010-196-080	0E	CHIP CAPACITOR,0.1-25	ABCD................
C	45	87-010-196-080	0E	CHIP CAPACITOR,0.1-25	ABCD................
C	42	87-010-313-080	0E	CAP, CHIP 18P	ABCD................
C	48	87-010-315-080	0E	C-CAP,S 27P-50 CH	ABCD................

ELECTRICAL MAIN PARTS LIST - 8/8

C	41	87-A11-006-080	0E	CAP,M 0.033-50 J DE	ABCD................
C	59	87-010-263-080	0E	CAP, ELECT 100-10V	ABCD................
C	58	87-010-316-080	0E	C-CAP,S 33P-50 CH	ABCD................
C	57	87-010-316-080	0E	C-CAP,S 33P-50 CH	ABCD................
C	50	87-012-140-080	0E	CAP 470P	ABCD................
C	61	87-010-196-080	0E	CHIP CAPACITOR,0.1-25	ABCD................
C	66	87-010-196-080	0E	CHIP CAPACITOR,0.1-25	ABCD................
C	60	87-010-196-080	0E	CHIP CAPACITOR,0.1-25	ABCD................
C	67	87-010-263-080	0E	CAP, ELECT 100-10V	ABCD................
C	68	87-010-322-080	0E	C-CAP,S 100P-50 CH	ABCD................
C	62	87-010-370-080	0E	CAP,E 330-6.3 SME	ABCD................
C	65	87-010-404-080	0E	CAP, ELECT 4.7-50V	ABCD................
C	79	87-010-197-080	0E	CAP, CHIP 0.01 DM	ABCD................
C	78	87-010-197-080	0E	CAP, CHIP 0.01 DM	ABCD................
C	75	87-010-197-080	0E	CAP, CHIP 0.01 DM	ABCD................
C	77	87-010-263-080	0E	CAP, ELECT 100-10V	ABCD................
C	76	87-A10-102-080	0E	CAP,E 1000-10 REA	ABCD................
C	80	87-010-112-080	0E	CAP, ELECT 100-16V	ABCD................
C	85	87-010-263-080	0E	CAP, ELECT 100-10V	ABCD................
C	81	87-010-405-080	0E	CAP, ELECT 10-50V	ABCD................
C	82	87-010-405-080	0E	CAP, ELECT 10-50V	ABCD................
C	84	87-012-157-080	0E	C-CAP,S 330P-50 CH	ABCD................
C	83	87-012-157-080	0E	C-CAP,S 330P-50 CH	ABCD................
C	93	87-010-196-080	0E	CHIP CAPACITOR,0.1-25	ABCD................
C	90	87-010-197-080	0E	CAP, CHIP 0.01 DM	ABCD................
C	97	87-010-197-080	0E	CAP, CHIP 0.01 DM	ABCD................
C	95	87-010-197-080	0E	CAP, CHIP 0.01 DM	ABCD................
C	96	87-010-221-080	0E	CAP, ELECT 470-10V	ABCD................
C	92	87-010-235-080	0E	CAP,E 470-16 SME	ABCD................
C	99	87-010-374-080	0E	CAP, ELECT 47-10V	ABCD................
C	91	87-010-404-080	0E	CAP, ELECT 4.7-50V	ABCD................
C	98	87-012-154-080	0E	C-CAP,S 150P-50 CH	ABCD................
C	100	87-010-318-080	0E	C-CAP,S 47P-50 CH	ABCD................
C	104	87-010-322-080	0E	C-CAP,S 100P-50 CH	ABCD................
C	106	87-010-322-080	0E	C-CAP,S 100P-50 CH	ABCD................
C	105	87-010-322-080	0E	C-CAP,S 100P-50 CH	ABCD................
C	103	87-010-322-080	0E	C-CAP,S 100P-50 CH	ABCD................
C	128	87-010-196-080	0E	CHIP CAPACITOR,0.1-25	ABCD................
C	124	87-010-322-080	0E	C-CAP,S 100P-50 CH	ABCD................
C	126	87-010-322-080	0E	C-CAP,S 100P-50 CH	ABCD................
C	127	87-010-322-080	0E	C-CAP,S 100P-50 CH	ABCD................
C	122	87-010-322-080	0E	C-CAP,S 100P-50 CH	ABCD................
C	123	87-010-322-080	0E	C-CAP,S 100P-50 CH	ABCD................
C	125	87-010-322-080	0E	C-CAP,S 100P-50 CH	ABCD................
C	121	87-010-322-080	0E	C-CAP,S 100P-50 CH	ABCD................
C	129	87-010-805-080	0E	CAP, S 1-16	ABCD................
C	131	87-010-805-080	0E	CAP, S 1-16	ABCD................
C	132	87-010-805-080	0E	CAP, S 1-16	ABCD................
C	155	87-010-197-080	0E	CAP, CHIP 0.01 DM	ABCD................
C	156	87-010-263-080	0E	CAP, ELECT 100-10V	ABCD................
C	151	87-010-805-080	0E	CAP, S 1-16	ABCD................
CN	2	87-099-203-010	0E	CONN,10P 6216 H	ABCD................
CN	1	87-A60-130-010	0E	CONN,5P V FE	ABCD................
CN	6	87-A60-130-010	0E	CONN,5P V FE	ABCD................
CN	3	87-A60-131-010	0E	CONN,6P V FE	ABCD................
CN	4	87-A60-248-010	0E	CONN,16P H CFF1416	ABCD................
D	4	87-020-465-080	0E	DIODE,1SS133 (110MA)	ABCD................
D	2	87-020-465-080	0E	DIODE,1SS133 (110MA)	ABCD................
D	1	87-020-465-080	0E	DIODE,1SS133 (110MA)	ABCD................
D	22	87-020-027-080	0E	CHIP-DIODE 1SS184	ABCD................
D	21	87-020-027-080	0E	CHIP-DIODE 1SS184	ABCD................
D	23	87-020-465-080	0E	DIODE,1SS133 (110MA)	ABCD................
FB	102	87-A90-896-080	0E	F-BEAD, 035600STY7	ABCD................
IC	6	87-020-903-010	1B	IC,NJM7805FA	ABCD................
IC	4	87-A20-157-010	1E	IC,TA2092N	ABCD................
IC	1	87-A20-446-010	1E	C-IC,LA9241ML	ABCD................
IC	2	87-A20-459-010	2A	C-IC,LC78622ED	ABCD................
IC	10	87-001-982-010	1B	IC,TA7291S	ABCD................
J	155	84-ZG1-244-310	1A	CABI,OPTICAL	ABCD................
LED	150	87-A40-558-010	0E	LED,SLZ-8128A-01-A	ABCD................
Q	1	87-026-463-080	0E	TR,2SA933S (0.3W)	ABCD................
Q	83	87-026-223-080	0E	TR,DTC143TK	ABCD................
Q	84	87-026-223-080	0E	TR,DTC143TK	ABCD................
Q	81	87-026-297-080	0E	TR,DTA144TK	ABCD................
Q	82	87-026-297-080	0E	TR,DTA144TK	ABCD................
Q	99	87-026-610-080	0E	TR,KTC3198GR	ABCD................
Q	96	89-109-521-080	0E	TR,2SA952 (0.6W)	ABCD................
Q	94	89-109-521-080	0E	TR,2SA952 (0.6W)	ABCD................
Q	90	89-109-521-080	0E	TR,2SA952 (0.6W)	ABCD................
Q	92	89-109-521-080	0E	TR,2SA952 (0.6W)	ABCD................
Q	98	89-318-155-080	0E	TR,2SC1815 (0.4W)	ABCD................
Q	150	87-A30-039-040	0E	C-TR,2SD1383K	ABCD................
R	70	87-029-124-090	0E	RESISTOR, FUSE 1/4W 2.2	ABCD................
R	73	87-029-361-090	0E	FUSING RESISTOR, 1/2W-3.3	ABCD................
X	1	87-A70-046-010	1B	VIB,XTAL 16.934MHZ	ABCD................

MECHANICAL PARTS LIST - 1/1

NOTE: The characters in the suffix column indicate the part usage.

55HR ...................XX..................................A...................
55K ....................XX...................................B..................
56EZ ...................XX....................................C.................
57EZ ...................XX.....................................D................

REF.NO	PARTS NO.	KANRI NO.	DESCRIPTION	SUFFIX
	8Z-CL6-001-010		CABI,FR U	AB..................
	8Z-CL6-003-010		CABI,FR EZ	..C.................
	8Z-CL6-005-010		CABI,FR EZ 57	...D................
	8Z-CL6-010-010		PANEL,REAR U	....
	8Z-CL6-011-010		PANEL,REAR LH	....
	8Z-CL6-012-010		PANEL,REAR EZ	..C.................
	8Z-CL6-013-010		PANEL,REAR K	.B..................
	8Z-CL6-014-010		PANEL,REAR D	....
	8Z-CL6-016-010		PANEL,REAR HRJ	A...................
	8Z-CL6-017-010		PANEL,REAR EZ 57	...D................
	8Z-CL6-025-010		CABI,TOP	ABCD................
	8Z-CL6-030-010		BOX,CASS	ABCD................
	8Z-CL6-036-010		PANEL,TRAY	ABCD................
	8Z-CL6-038-010	1D	PANEL,CASS	AB..................
	8Z-CL6-039-010		PANEL,CASS EZ	..CD................
	8Z-CL6-040-010	1C	PANEL,FR	AB..................
	8Z-CL6-041-010	1C	PANEL,FR EZ	..CD................
	8Z-CL6-042-010	1C	PANEL,FR D	....
	8Z-CL6-060-010	1B	KEY,POWER	ABCD................
	8Z-CL6-061-010		KEY,OPEN	ABCD................
	8Z-CL6-062-010		KEY,ENTER	ABCD................
	8Z-CL6-063-010		KEY,DEMO	ABCD................
	8Z-CL6-064-010	1C	KEY,CON	ABCD................
	8Z-CL6-076-010		KEY,FUNC ASSY	ABCD................
	8Z-CL6-080-010	1B	KNOB,RTRY VOL	ABCD................
	8Z-CL6-081-010	1B	KNOB,RTRY JOG	ABCD................
	87-B00-002-010	0E	BADGE,AIWA 30 ABS SIL	ABCD................
	8Z-CL6-045-010		WINDOW,DISP	AB..................
	8Z-CL6-046-010		WINDOW,DISP EZ	..CD................
	8Z-CL6-050-010		WINDOW,CASS	ABCD................
	8Z-CL6-085-010		LENS,STANDBY	ABCD................
	82-NF5-229-010	0E	PLATE,LOCK	ABCD................
	82-ZM1-264-010	0E	LVR,EJECT R	ABCD................
	86-NF9-224-010	0E	SPR-C,LOCK	ABCD................
	87-NF4-217-110	0E	HLDR,LOCK 2	ABCD................
	87-NF8-220-010	0E	DMPR,150	ABCD................
	88-CL4-215-010	0E	CUSH,FOOT FR	ABCD................
	88-CL4-220-010	0E	SPR-T,CASS	ABCD................
	8Z-CL6-202-010		HLDR,CD	ABCD................
	8Z-CL6-222-010		HLDR,HT-SINK	ABCD................
	8Z-CL6-225-010		HLDR,TRANS	ABCD................
	8Z-CL6-226-010		HLDR,FAN	ABCD................
	87-067-689-010	0E	TAPPING SCREW, BVTT+3-8	ABCD................
	87-067-703-010	0E	TAPPING SCREW, BVT2+3-10	ABCD................
	87-067-822-010	0E	BVT2+3-20 W/O SLOT	ABCD................
	87-571-032-410	0E	VIT+2-3	ABCD................
	87-B10-250-010	0E	BVT2+3-12 W/O SLOT CR SILVER	ABCD................
*	87-581-169-410	0E	UIT+4-6	ABCD................
*	87-B10-230-010	0E	BVT2+3-10 W/O SLOT SILVER CR	ABCD................
*	87-B10-231-010	0E	QT1+3-12 SILVER CR	ABCD................
	84-ZG1-245-210	0E	CAP,OPTICAL	ABCD................
	87-050-098-010	1B	AC CODE ASSY,D	....
	87-050-108-010		AC CORD ASSY,K 3PH	.B..................
	87-A30-126-010	1A	TR,2SB1616	ABCD................
	87-A30-127-010	1A	TR,2SD2478	ABCD................
	87-A30-214-010	1B	TR,2SB1344	ABCD................
	87-A30-215-010	1B	TR,2SD2025	ABCD................
	87-A80-092-010	1C	AC CORD ASSY,E BLK SUN FAI	A.CD................
	87-A80-110-010	1B	AC CORD ASSY,U SPT-2W	....
	87-A91-348-010	2A	FAN, F614R-12MC-19-175MM	ABCD................
	88-905-231-110	0E	FF-CABLE, 5P 1.25 230MM	ABCD................
	88-905-301-110	0E	FF-CABLE, 5P 300MM	ABCD................
	88-906-171-110	0E	FF-CABLE,6P 1.25	ABCD................
	88-910-271-210		FF-CABLE, 10P 1.25 270MM	ABCD................
	89-213-702-010	1A	TR,2SB1370 (1.8W)	ABCD................
	8Z-CL7-704-010	0E	FF-CABLE, 16P 1.0	ABCD................
C 803	87-A10-207-080	0E	CAP,TCS 0.01-50KBUP050	.BCD................
CN 301	88-CL4-701-010	1B	CONN ASSY,7P RPEH	ABCD................
F 101	87-035-190-010	1A	FUSE, 2AT	A...................
F 101	87-035-222-010	1A	FUSE, 1AT	.BCD................
F 101	87-035-414-010	1A	FUSE, T2A 250V UL	....
F 101	87-035-488-010	0E	FUSE,3.15A 125V D UL	....
PT 101	8Z-CL6-601-010	2B	PT,U EI66-60 ZCL6	....
PT 101	8Z-CL6-602-010	2B	PT,HR EI66-60 ZCL6	A...................
PT 101	8Z-CL6-604-010	2B	PT,EZ EI66-60 ZCL6	.BCD................
PT 101	8Z-CL6-605-010	2B	PT,D EI66-60 ZCL6	....
	8Z-CL6-228-010		HLDR,DIODE	ABCD................
W 101	8Z-CL6-642-010		CONN ASSY,11P ZCL6	ABCD................
WH 101	87-A91-179-010	0E	HLDR,WIRE 2.5-11P	ABCD................

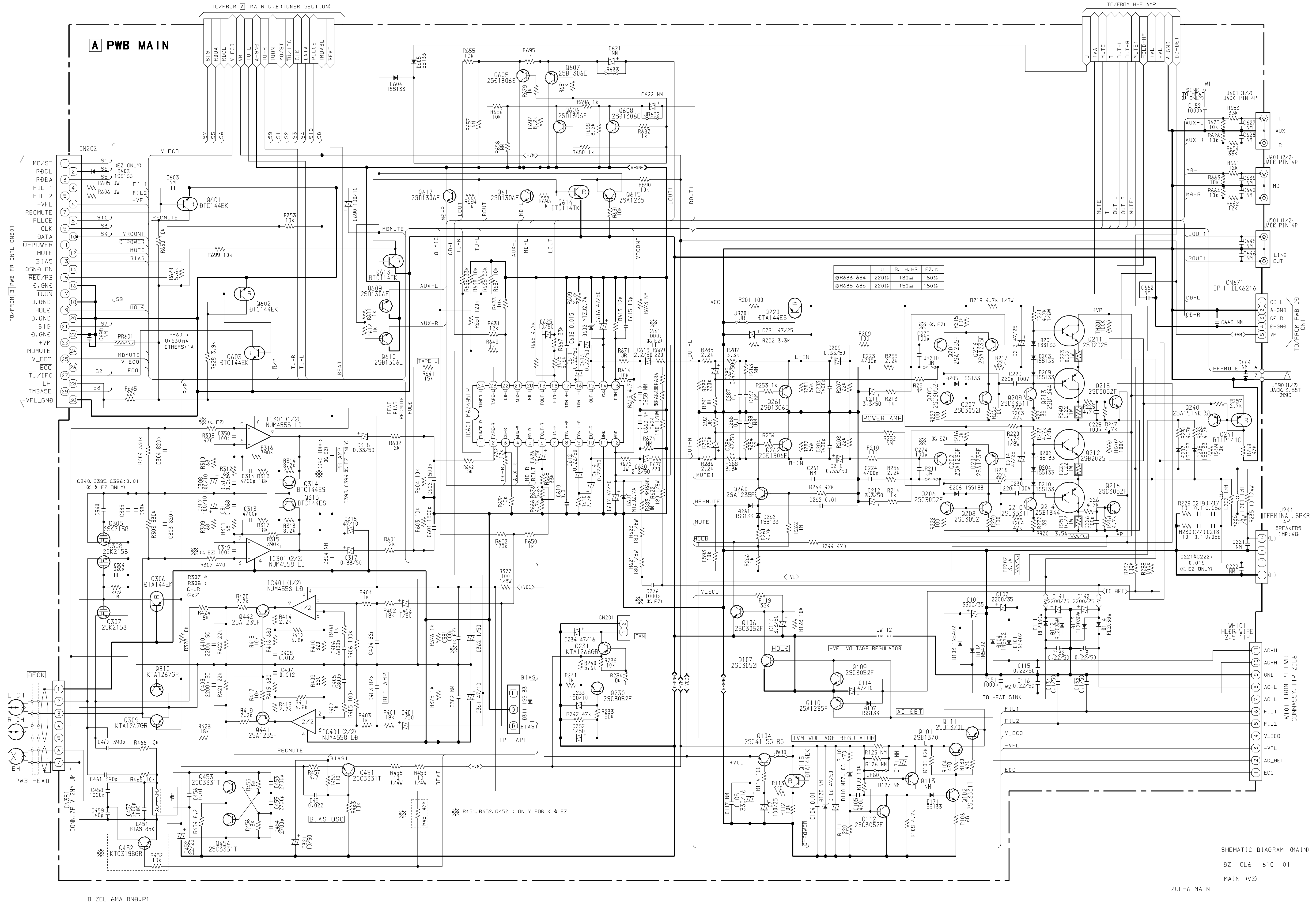
ACCESSORIES / PACKAGE LIST - 1/1

NOTE: The characters in the suffix column indicate the part usage.

55HR ..................XX..................................A...................
55K ...................XX...................................B..................
56EZ ..................XX....................................C.................
57EZ ..................XX.....................................D................

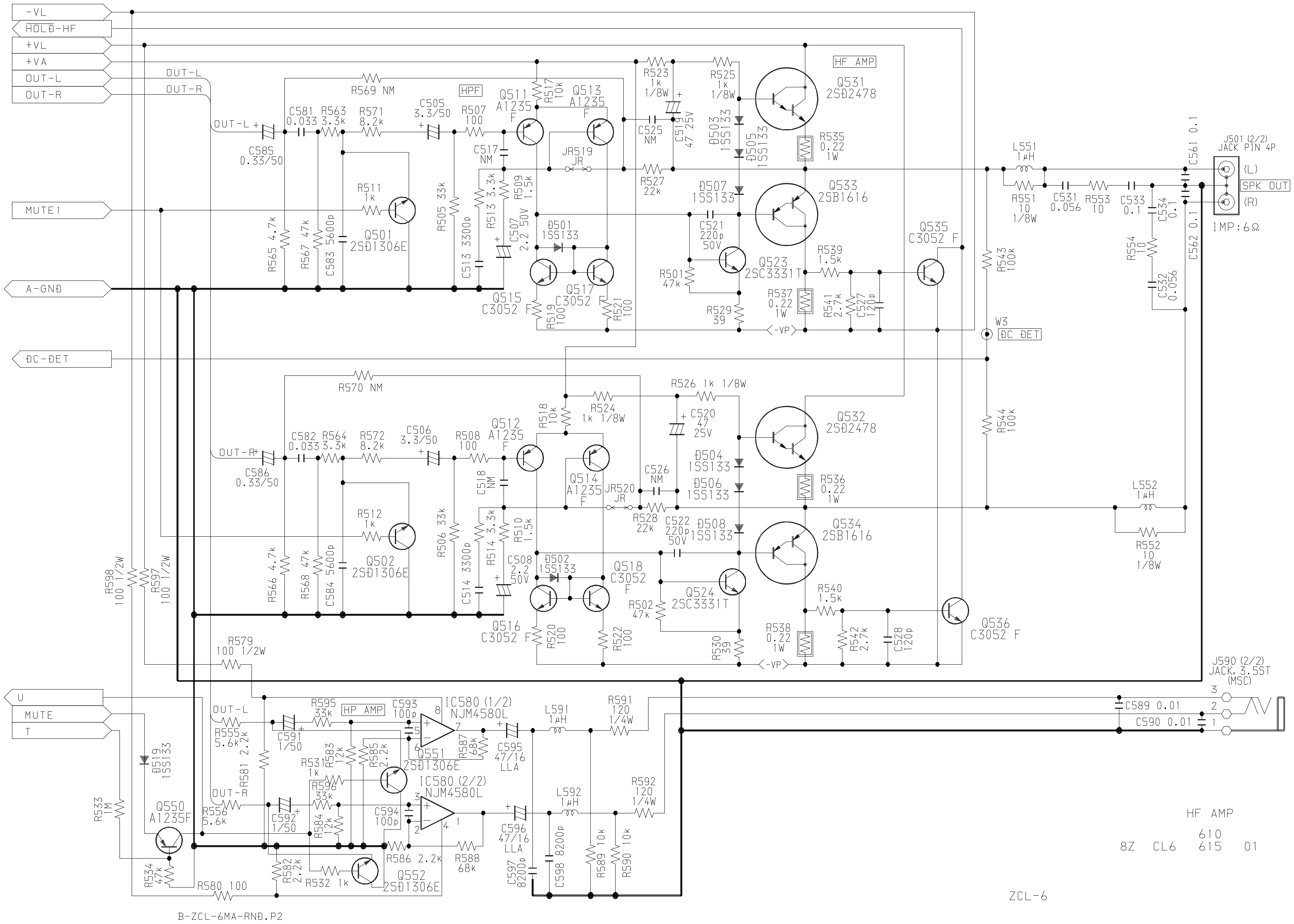
REF.NO	PARTS NO.	KANRI NO.	DESCRIPTION	SUFFIX
	8Z-CL6-901-010		IB,U (ESF)-C	....
	8Z-CL6-902-010		IB,H (ESC)-C	A...................
	8Z-CL6-903-010		IB,LH (ESP)-C	....
	8Z-CL6-904-010		IB,K (E)-C	.B..................
	8Z-CL6-905-010		IB,E (9L)-C	..CD................
	8Z-CL6-906-010		IB,D (J)-C	....
	87-043-115-010	1A	ANT,FEEDER FM	A...................
	87-A90-030-010	1B	ANT,LOOP AM-NC C	ABCD................
	87-A90-118-010	0E	ANT,WIRE FM (Z)	.BCD................
	87-A91-017-010	1A	PLUG,CONVERSION JT-0476	A...................
	8Z-CK4-962-010	1H	RC UNIT,RC-ZAT04 (VS)	ABCD................

SCHEMATIC DIAGRAM – 1 (MAIN 1/3)


A PWB MAIN
TO/FROM A MAIN C.B (TUNER SECTION)
TO/FROM H-F AMP
TO/FROM B PWB FR CNTL CN301
CN202
MO/ST
RDCL
RDDA
FIL 1
FIL 2
-VFL
RECMUTE
PLLCE
CLK
DATA
D-POWER
MUTE
BIAS
QSND ON
REC/PB
D.GND
TUON
HOLD
SIG
+VM
MDMUTE
V_ECO
ECO
TU/IFC
LH
TMBASE
-VFL_GND
Q601 DTC144EK
Q602 DTC144EK
Q603 DTC144EK
Q605 2SD1306E
Q606 2SD1306E
Q607 2SD1306E
Q608 2SD1306E
Q609 2SD1306E
Q610 2SD1306E
Q611 2SD1306E
Q612 2SD1306E
Q613 DTC114TK
Q614 DTC114TK
Q615 2SA1235F
IC601 M62495FP
IC301 (1/2) NJM4558 LD
IC301 (2/2) NJM4558 LD
IC401 (1/2) NJM4558 LD
IC401 (2/2) NJM4558 LD
PB AMP
REC AMP
BIAS OSC
Q305 2SK2158
Q306 DTA144EK
Q307 2SK2158
Q308 2SK2158
Q309 KTA1267GR
Q310 KTA1267GR
Q441 2SA1235F
Q442 2SA1235F
Q451 2SC3331T
Q452 KTC3198GR
Q453 2SC3331T
Q454 2SC3331T
L451 BIAS 85K
DECK
PWB HEAD
L CH
R CH
EH
CN351 CONN.7P V 2MM JM T
TP-TAPE
BIAS
BIAS1
※ R451, R452, Q452 : ONLY FOR K & EZ
C340, C385, C386:0.01 (K & EZ ONLY)
PR601: U:630mA OTHERS:1A
CN201
FAN
Q231 KTA1266GR
Q230 2SC3052F
Q220 DTA144ES
Q260 2SA1235F
Q261 2SD1306E
Q262 2SD1306E
Q201 2SA1235F
Q202 2SA1235F
Q203 2SA1235F
Q204 2SA1235F
Q205 2SC3052F
Q206 2SC3052F
Q207 2SC3052F
Q208 2SC3052F
Q209 2SC3331T
Q210 2SC3331T
Q211 2SB2025
Q212 2SB2025
Q213 2SB1344
Q214 2SB1344
Q215 2SC3052F
Q216 2SC3052F
Q240 2SA1514K (S)
Q241 RT1P141C
POWER AMP
PR201 3.5A
PR202 3.5A
J601 (1/2) JACK PIN 4P
J601 (2/2) JACK PIN 4P
J501 (1/2) JACK PIN 4P
AUX
MD
LINE OUT
CN671 5P H BLK6216
TO/FROM PWB CD CN1
J590 (1/2) JACK 3.5ST (MSC)
HP-MUTE
J241 TERMINAL SPKR 4P
SPEAKERS IMP:6Ω
C221&C222: 0.018 (K, EZ ONLY)
SINK TO HEAT (U ONLY)
W1
WH101 HLDR WIRE 2.5-11P
W101 FROM PT PWB CONNASSY.11P ZCL6
AC-H
GND
AC-L
FIL1
FIL2
V_ECO
-VFL
AC_BET
ECO
Q106 2SC3052F
Q107 2SC3052F
Q109 2SC3052F
Q110 2SA1235F
-VFL VOLTAGE REGULATOR
HOLD
AC DET
Q101 2SB1370
Q111 2SB1370E
Q102 2SC3331T
Q104 2SC4115S RS
Q112 2SC3052F
Q113 NM
Q115 DTA144EK
+VM VOLTAGE REGULATOR
D-POWER
TO HEAT SINK
JW112
SHEMATIC DIAGRAM (MAIN)
8Z CL6 610 01
MAIN (V2)
ZCL-6 MAIN
B-ZCL-6MA-RND.PI

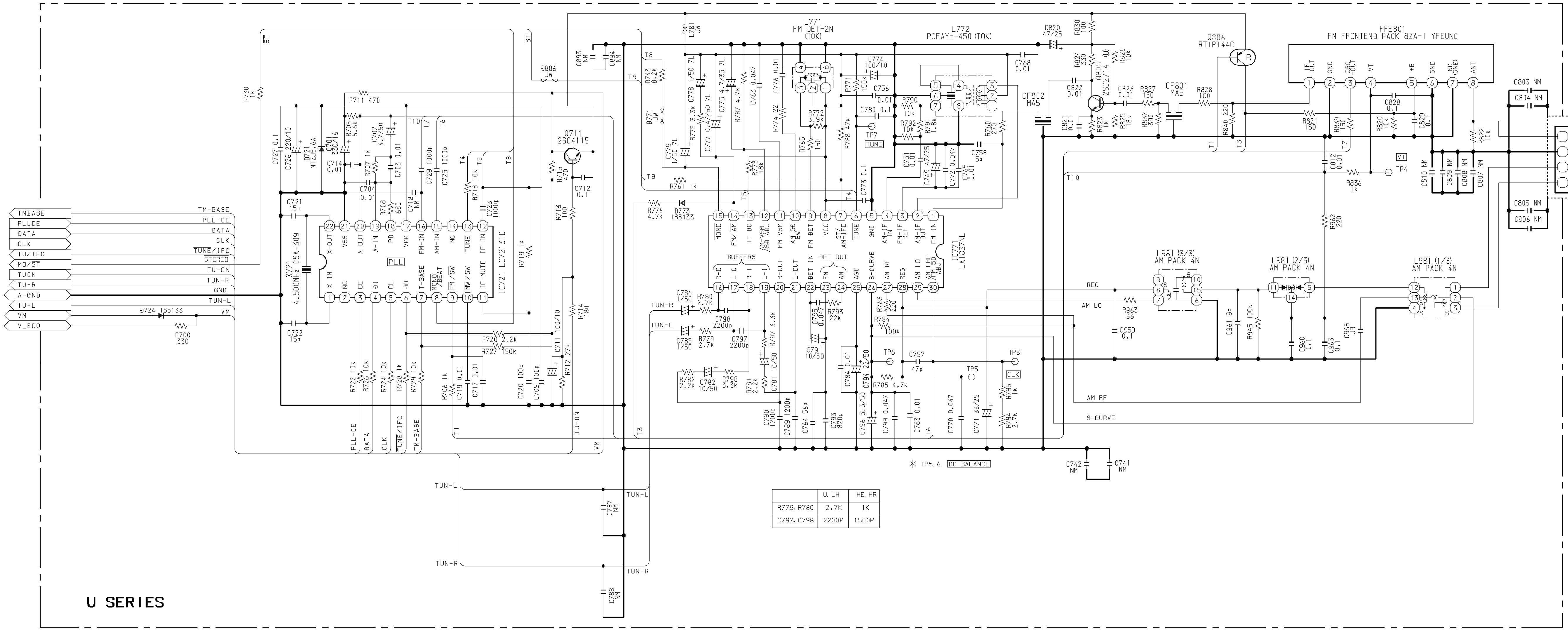
	U	B, LH, HR	EZ, K
※R683, 684	220Ω	180Ω	180Ω
※R685, 686	220Ω	150Ω	180Ω

SCHEMATIC DIAGRAM – 2 (MAIN 2/3)



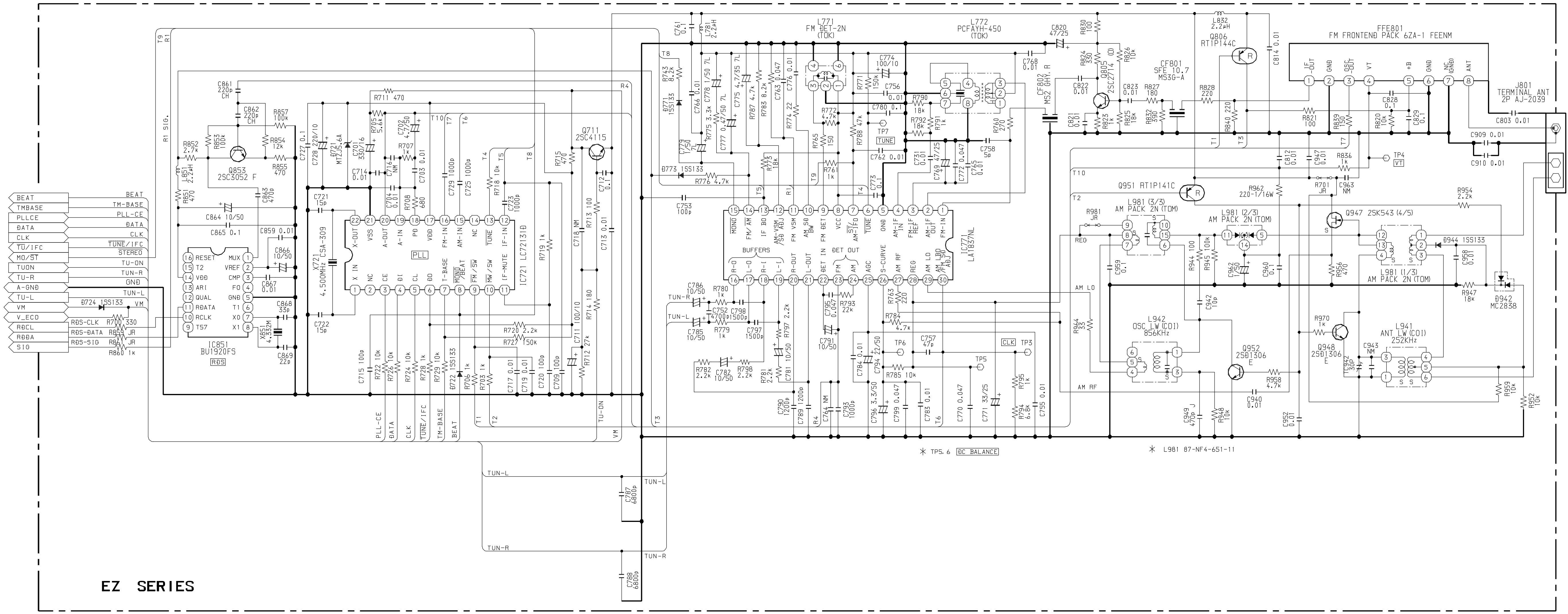
-VL
HOLD-HF
+VL
+VA
OUT-L
OUT-R
MUTE1
A-GND
DC-DET
U
MUTE
T
HPF
HF AMP
HP AMP
R569 NM
R570 NM
C581 0.033
R563 3.3k
R571 8.2k
C505 3.3/50
R507 100
Q511 A1235 F
R517 10k
Q513 A1235 F
R523 1k 1/8W
R525 1k 1/8W
Q531 2SD2478
C525 NM
C519 47 25V
D503 1SS133
D505 1SS133
R535 0.22 1W
C585 0.33/50
C517 NM
JR519 JR
R527 22k
D507 1SS133
Q533 2SB1616
R511 1k
Q501 2SD1306E
R565 4.7k
R567 47k
C583 5600p
R505 33k
C513 3300p
R513 3.3k
R509 1.5k
C507 2.2 50V
D501 1SS133
C521 220p 50V
R501 47k
Q523 2SC3331T
R539 1.5k
Q535 C3052 F
R543 100k
Q515 C3052 F
Q517 C3052 F
R519 100
R521 100
R537 0.22 1W
R529 39
R541 2.7k
C527 120p
-VP
W3
DC DET
L551 1μH
R551 10 1/8W
C531 0.056
R553 10
C533 0.1
C534 0.1
R554 10
C532 0.056
C561 0.1
C562 0.1
J501 (2/2) JACK PIN 4P
(L)
(R)
SPK OUT
IMP:6Ω
R526 1k 1/8W
R518 10k
R524 1k 1/8W
C520 47 25V
Q532 2SD2478
Q512 A1235 F
C582 0.033
R564 3.3k
R572 8.2k
C506 3.3/50
R508 100
C586 0.33/50
C518 NM
Q514 A1235 F
JR520 JR
C526 NM
D504 1SS133
D506 1SS133
R536 0.22 1W
R544 100k
L552 1μH
R528 22k
C522 220p 50V
D508 1SS133
Q534 2SB1616
R552 10 1/8W
R512 1k
Q502 2SD1306E
R566 4.7k
R568 47k
C584 5600p
R506 33k
C514 3300p
R514 3.3k
R510 1.5k
C508 2.2 50V
D502 1SS133
Q518 C3052 F
Q524 2SC3331T
R502 47k
R540 1.5k
Q536 C3052 F
R538 0.22 1W
R542 2.7k
C528 120p
R530 39
Q516 C3052 F
R520 100
R522 100
R598 100 1/2W
R597 100 1/2W
R579 100 1/2W
OUT-L
OUT-R
R595 33k
C593 100p
IC580 (1/2) NJM4580L
L591 1μH
R591 120 1/4W
J590 (2/2) JACK 3.5ST (MSC)
C589 0.01
C590 0.01
R555 5.6k
C591 1/50
R581 2.2k
R583 12k
R585 2.2k
R587 68k
C595 47/16 LLA
Q551 2SD1306E
D519 1SS133
R531 1k
R596 33k
IC580 (2/2) NJM4580L
L592 1μH
R592 120 1/4W
R533 1M
Q550 A1235F
R556 5.6k
C592 1/50
R584 12k
C594 100p
C596 47/16 LLA
R586 2.2k
R588 68k
R534 47k
R582 2.2k
R532 1k
Q552 2SD1306E
C597 8200p
C598 8200p
R589 10k
R590 10k
R580 100
B-ZCL-6MA-RNØ.P2
HF AMP
8Z CL6 610 615 01
ZCL-6

SCHEMATIC DIAGRAM – 3 (MAIN 3/3: TUNER SECTION) <HR>


TMBASE
PLLCE
DATA
CLK
TU/IFC
MO/ST
TUON
TU-R
A-GND
TU-L
VM
V_ECO
TM-BASE
PLL-CE
DATA
CLK
TUNE/IFC
STEREO
TU-ON
TUN-R
GND
TUN-L
VM
D724 1SS133
R700 330
X721 4.500MHz CSA-309
IC721 LC72131D
PLL
Q711 2SC4115
D886 JW
L771 FM DET-2N (TOK)
L772 PCFAYH-450 (TOK)
IC771 LA1837NL
BUFFERS
DET OUT
Q806 RT1P144C
Q805 2SC2714 (O)
CF801 MA5
CF802 MA5
FFE801 FM FRONTEND PACK 8ZA-1 YFEUNC
IF OUT
GND
OSC OUT
VT
+B
NC (GND)
ANT
J801 4P MSP-154V-02
FM
AM
L981 (3/3) AM PACK 4N
L981 (2/3) AM PACK 4N
L981 (1/3) AM PACK 4N
REG
AM LO
AM RF
S-CURVE
TP3
TP4
TP5
TP6
TP7
TUNE
CLK
VT
TPS, 6 DC BALANCE
TUN-L
TUN-R
C787 NM
C788 NM
C741 NM
C742 NM
U SERIES

	U, LH	HE, HR
R779, R780	2.7K	1K
C797, C798	2200P	1500P

SCHEMATIC DIAGRAM – 4 (MAIN 3/3: TUNER SECTION) <EZ>

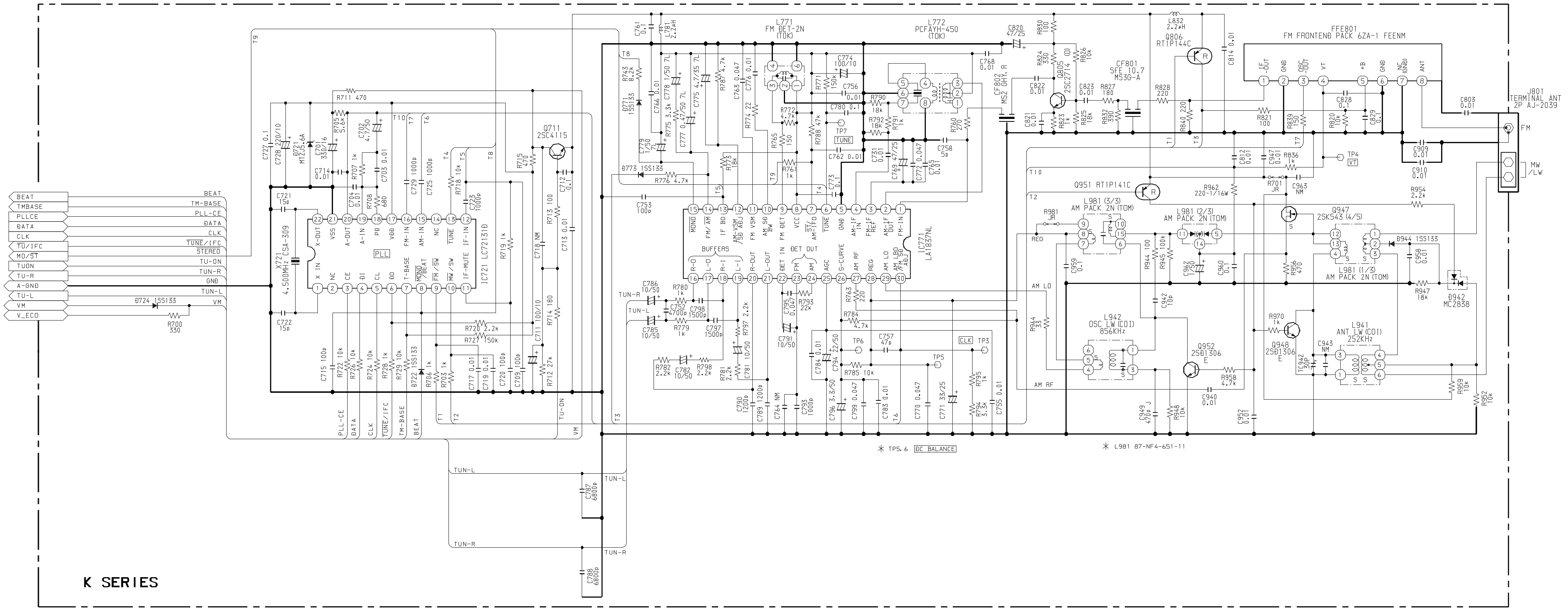

BEAT
TMBASE
PLLCE
DATA
CLK
TU/IFC
MO/ST
TUON
TU-R
A-GND
TU-L
VM
V_ECO
RDCL
RDDA
SIG
IC851 BU1920FS
RDS
Q853 2SC3052 F
IC721 LC72131D
PLL
X721 CSA-309 4.500MHz
Q711 2SC4115
L771 FM DET-2N (TOK)
L772 PCFAYH-450 (TOK)
IC771 LA1837NL
BUFFERS
DET OUT
TP7 TUNE
TP6
TP5
TP3 CLK
CF802 MS2 GHY.R
CF801 SFE 10.7 MS3G-A
Q805 2SC2714 (O)
Q806 RT1P144C
L832 2.2µH
FFE801 FM FRONTEND PACK 6ZA-1 FEENM
J801 TERMINAL ANT 2P AJ-2039
FM
MW /LW
TP4 VT
Q951 RT1P141C
L981 (3/3) AM PACK 2N (TOM)
L981 (2/3) AM PACK 2N (TOM)
L981 (1/3) AM PACK 2N (TOM)
Q947 2SK543 (4/5)
D944 1SS133
D942 MC2838
L942 OSC LW (COI) 856KHz
L941 ANT LW (COI) 252KHz
Q952 2SD1306 E
Q948 2SD1306 E
REG
AM LO
AM RF
TUN-L
TUN-R
C787 6800p
C788 6800p
EZ SERIES
* TPS.6 DC BALANCE
* L981 87-NF4-651-11

TUNER.EZ

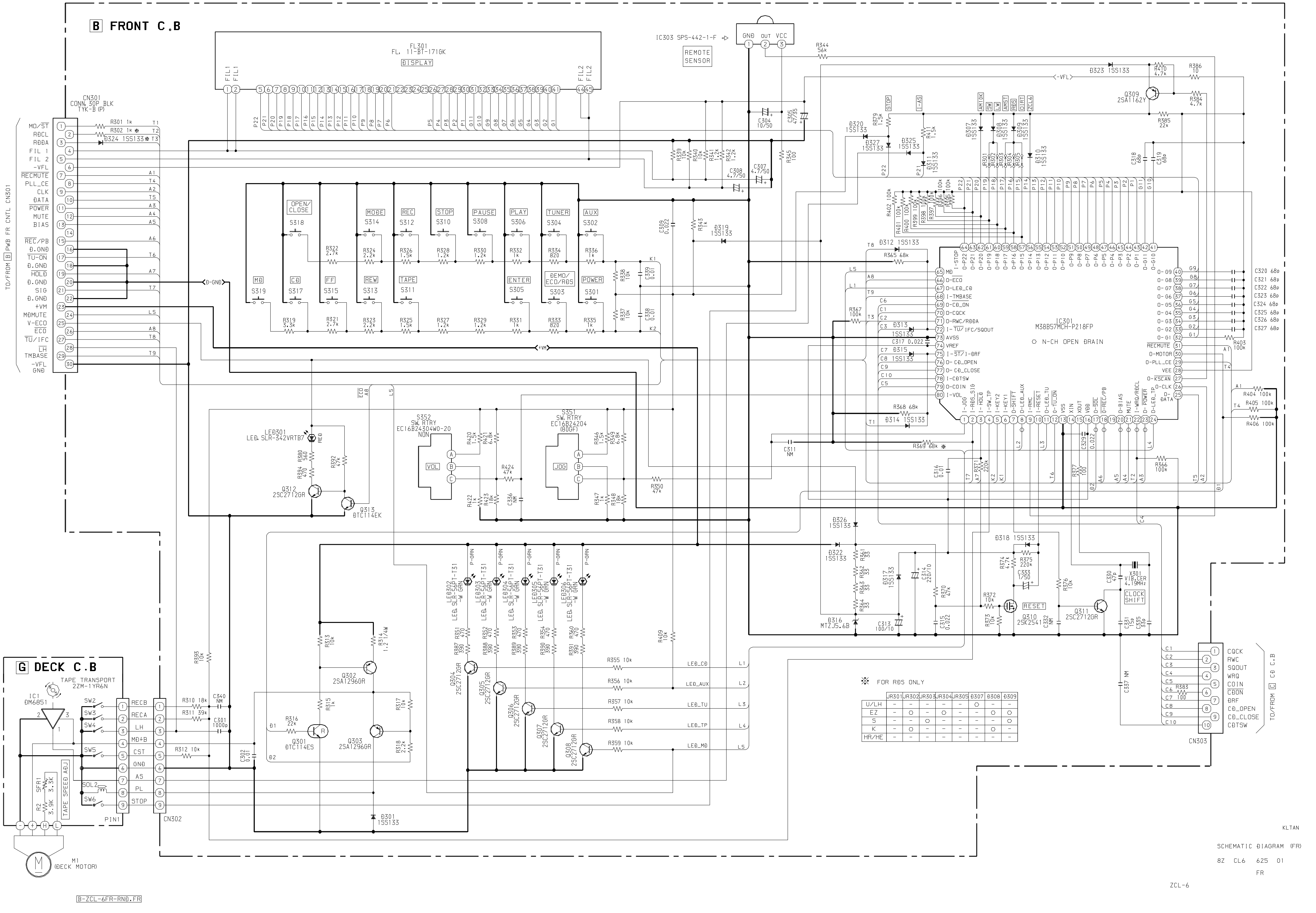
ZCL-6

B-ZCL-6TU-EZ-RND.P1

SCHEMATIC DIAGRAM – 5 (MAIN 3/3: TUNER SECTION) <K>


K SERIES
BEAT
TMBASE
PLLCE
DATA
CLK
TU/IFC
MO/ST
TUON
TU-R
A-GND
TU-L
VM
V_ECO
TM-BASE
PLL-CE
TUNE/IFC
STEREO
TU-ON
GND
D724 1SS133
R700 330
IC721 LC72131D
PLL
X721 4.500MHz CSA-309
Q711 2SC4115
IC771 LA1837NL
BUFFERS
DET OUT
L771 FM DET-2N (TOK)
L772 PCFAYH-450 (TOK)
CF802 MS2 GHY.R
CF801 SFE 10.7 MS3G-A
Q805 2SC2714 (O)
Q806 RT1P144C
FFE801 FM FRONTEND PACK 6ZA-1 FEENM
J801 TERMINAL ANT 2P AJ-2039
FM
MW /LW
Q951 RT1P141C
L981 (3/3) AM PACK 2N (TOM)
L981 (2/3) AM PACK 2N (TOM)
L981 (1/3) AM PACK 2N (TOM)
Q947 2SK543 (4/5)
D944 1SS133
D942 MC2838
L942 OSC LW (COI) 856KHz
L941 ANT LW (COI) 252KHz
Q952 2SD1306
Q948 2SD1306
TP3
TP4
TP5
TP6
TP7 TUNE
TUN-L
TUN-R
C787 6800p
C788 6800p
* TP5, 6 DC BALANCE
* L981 87-NF4-651-11

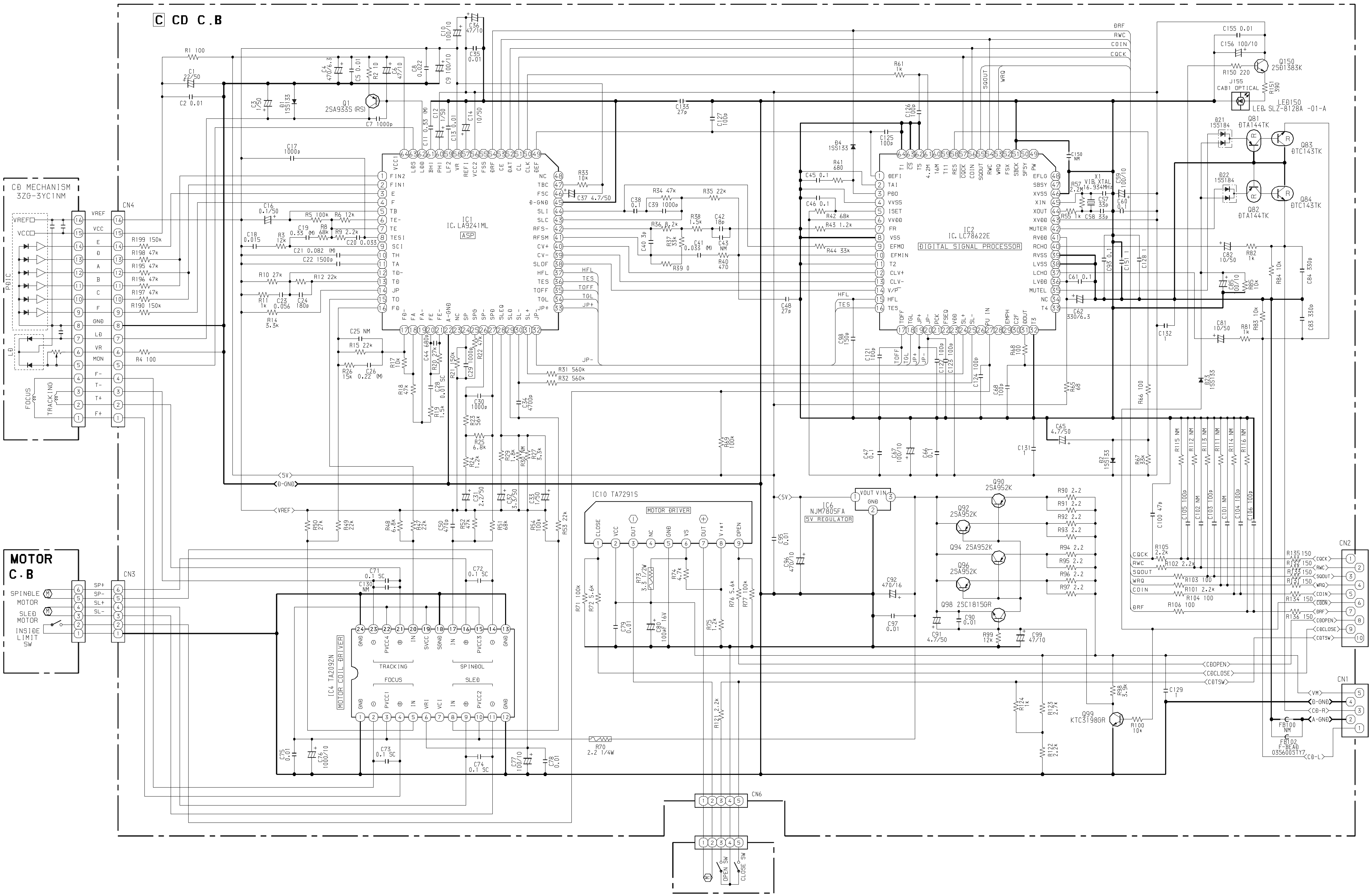
SCHEMATIC DIAGRAM – 6 (FRONT)


B FRONT C.B
G DECK C.B
FL301 FL 11-BT-171GK DISPLAY
IC303 SPS-442-1-F
REMOTE SENSOR
GND OUT VCC
CN301 CONN 30P BLK TYK-B(P)
TO/FROM B PWB FR CNTL CN301
MD/ST
RDCL
RDDA
FIL 1
FIL 2
-VFL
RECMUTE
PLL_CE
CLK
DATA
POWER
MUTE
BIAS
REC/PB
D.GND
TU-ON
D.GND
HOLD
D.GND
SIG
D.GND
+VM
MDMUTE
V-ECO
ECO
TU/IFC
LH
TMBASE
-VFL
GND
IC301 M38B57MCH-P218FP
○ N-CH OPEN DRAIN
OPEN/CLOSE S318
MODE S314
REC S312
STOP S310
PAUSE S308
PLAY S306
TUNER S304
AUX S302
MD S319
CD S317
FF S315
REW S313
TAPE S311
ENTER S305
DEMO/ECO/RDS S303
POWER S301
S352 SW.RTRY EC16B24304W0-20 NON
VOL
S351 SW.RTRY EC16B24204 (B0GF)
JOG
LED301 LED SLR-342VRTB7
Q312 2SC2712GR
Q313 DTC114EK
Q309 2SA1162Y
Q310 2SK2541
RESET
Q311 2SC2712GR
X301 VIB.CER 4.19MHz
CLOCK SHIFT
Q302 2SA1296GR
Q301 DTC114ES
Q303 2SA1296GR
Q304 2SC2712GR
Q305 2SC2712GR
Q306 2SC2712GR
Q307 2SC2712GR
Q308 2SC2712GR
LED302 LED SLR-56PT-T31 -W GRN
LED303 LED SLR-56PT-T31 -W GRN
LED304 LED SLR-56PT-T31 -W GRN
LED305 LED SLR-56PT-T31 -W GRN
LED306 LED SLR-56PT-T31 -W GRN
LED_CD
LED_AUX
LED_TU
LED_TP
LED_MD
D301 1SS133
D316 MTZJ5.6B
CN303
CQCK
RWC
SQOUT
WRQ
COIN
CDON
DRF
CD_OPEN
CD_CLOSE
CDTSW
TO/FROM C CD C.B
TAPE TRANSPORT 2ZM-1YR6N
IC1 DM6851
SW2
SW3
SW4
SW5
SW6
SOL2
SFR1 3.3K
R2 3.9K
TAPE SPEED ADJ
PIN1
CN302
RECB
RECA
LH
MD+B
CST
GND
AS
PL
STOP
M1 (DECK MOTOR)
KLTAN
SCHEMATIC DIAGRAM (FR)
8Z CL6 625 01
FR
ZCL-6
B-ZCL-6FR-RN0.FR

※ FOR RDS ONLY

	JR301	JR302	JR303	JR304	JR305	D307	D308	D309
U/LH	–	–	–	–	–	○	–	–
EZ	–	○	–	○	–	–	○	○
S	–	–	○	–	–	–	–	○
K	–	○	–	–	–	–	○	–
HR/HE	–	–	–	–	–	–	–	–

SCHEMATIC DIAGRAM – 7 (CD)


C CD C.B
CD MECHANISM
3ZG-3YC1NM
PDIC
LD
FOCUS
TRACKING
CN4
VREF
VCC
E
D
A
B
C
F
GND
LD
VR
MON
F-
T-
T+
F+
IC1
IC LA9241ML
ASP
IC2
IC LC78622E
DIGITAL SIGNAL PROCESSOR
Q1
2SA933S (RS)
X1
VIB XTAL
16.934MHz
Q150
2SD1383K
J155
CAB1 OPTICAL
LED150
LED SLZ-8128A -01-A
Q81
DTA144TK
Q83
DTC143TK
Q82
DTA144TK
Q84
DTC143TK
MOTOR
C.B
SPINDLE
MOTOR
SLED
MOTOR
INSIDE
LIMIT
SW
CN3
SP+
SP-
SL+
SL-
IC4 TA2092N
MOTOR COIL DRIVER
TRACKING
SPINDOL
FOCUS
SLED
IC10 TA7291S
MOTOR DRIVER
CLOSE
VCC
OUT
NC
GND
VS
OUT
Vref
OPEN
IC6
NJM7805FA
5V REGULATOR
VOUT VIN
GND
Q90
2SA952K
Q92
2SA952K
Q94 2SA952K
Q96
2SA952K
Q98 2SC1815GR
Q99
KTC3198GR
CN2
TO/FROM B FRONT C.B
CN303
CQCK
RWC
SQOUT
WRQ
COIN
CDIN
DRF
CDOPEN
CDCLOSE
CDTSW
CN1
TO/FROM A MAIN C.B
CN671
VM
D-GND
CD-R
A-GND
CD-L
FB100
NM
FB102
F-BEAD
0356005TY7
5V
D-GND
VREF
CN6
OPEN SW
CLOSE SW

KLTAN

CD CCT DIAGRAM

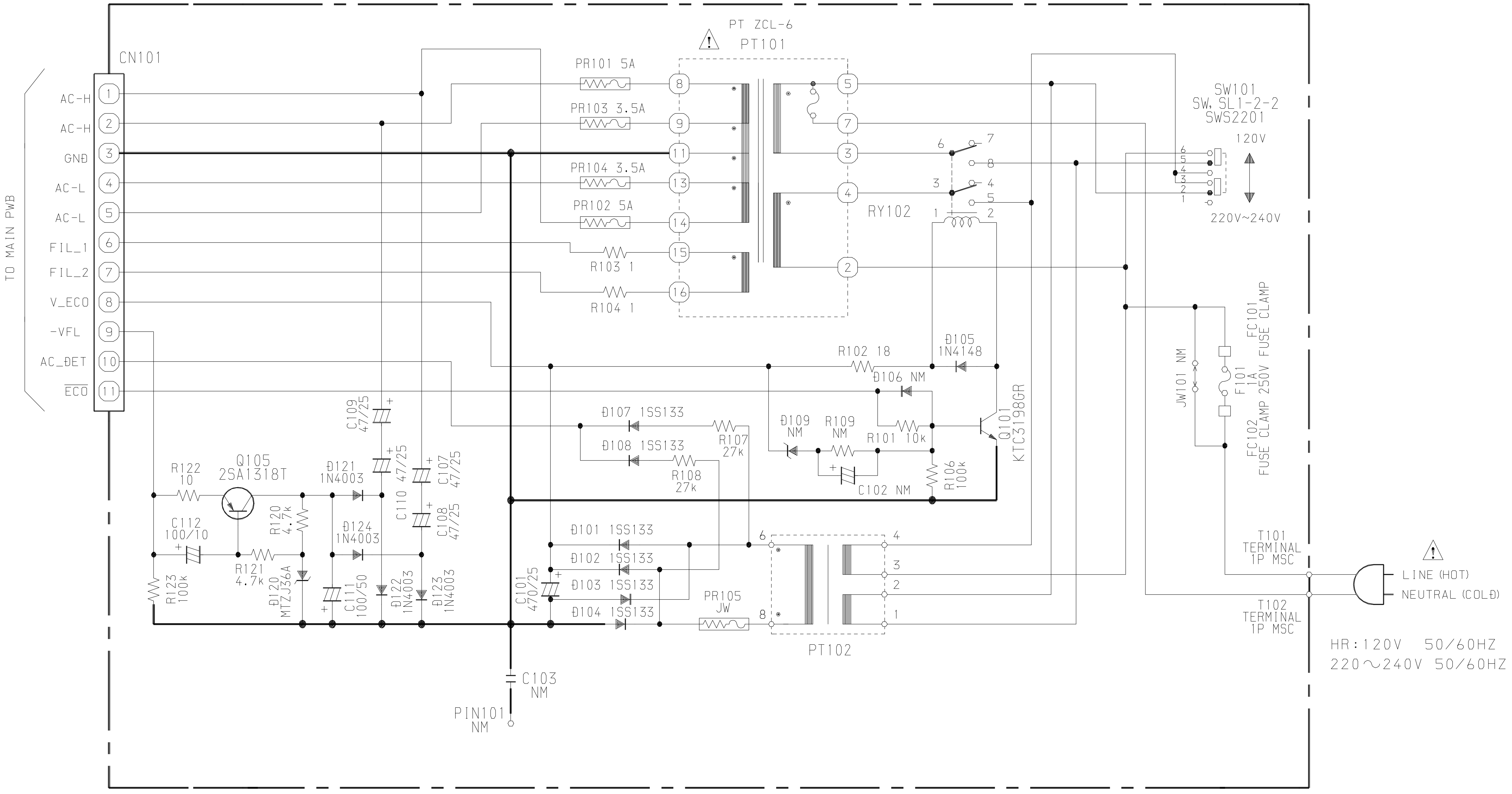
8Z CL6 630 01

CD

ZCL-6

B-ZCL-6CD-RND.CD

SCHEMATIC DIAGRAM – 8 (PT) <HR>


TO MAIN PWB
CN101
AC-H
AC-H
GND
AC-L
AC-L
FIL_1
FIL_2
V_ECO
-VFL
AC_DET
ECO
PT ZCL-6
PT101
PR101 5A
PR103 3.5A
PR104 3.5A
PR102 5A
R103 1
R104 1
RY102
SW101
SW, SL1-2-2
SWS2201
120V
220V~240V
FC101
FUSE CLAMP
F101
1A
FUSE CLAMP 250V
FC102
FUSE CLAMP
JW101 NM
R102 18
D105
1N4148
D106 NM
D107 1SS133
D108 1SS133
R107
27k
R108
27k
D109
NM
R109
NM
R101 10k
C102 NM
R106
100k
Q101
KTC3198GR
R122
10
Q105
2SA1318T
C112
100/10
R121
4.7k
R120
4.7k
D120
MTZJ36A
R123
100k
C109
47/25
D121
1N4003
C110 47/25
C107
47/25
C108
47/25
D124
1N4003
C111
100/50
D122
1N4003
D123
1N4003
C101
470/25
D101 1SS133
D102 1SS133
D103 1SS133
D104 1SS133
PR105
JW
PT102
C103
NM
PIN101
NM
T101
TERMINAL
1P MSC
T102
TERMINAL
1P MSC
LINE (HOT)
NEUTRAL (COLD)
HR:120V 50/60HZ
220～240V 50/60HZ

SCHEMATIC DIAG (PT)

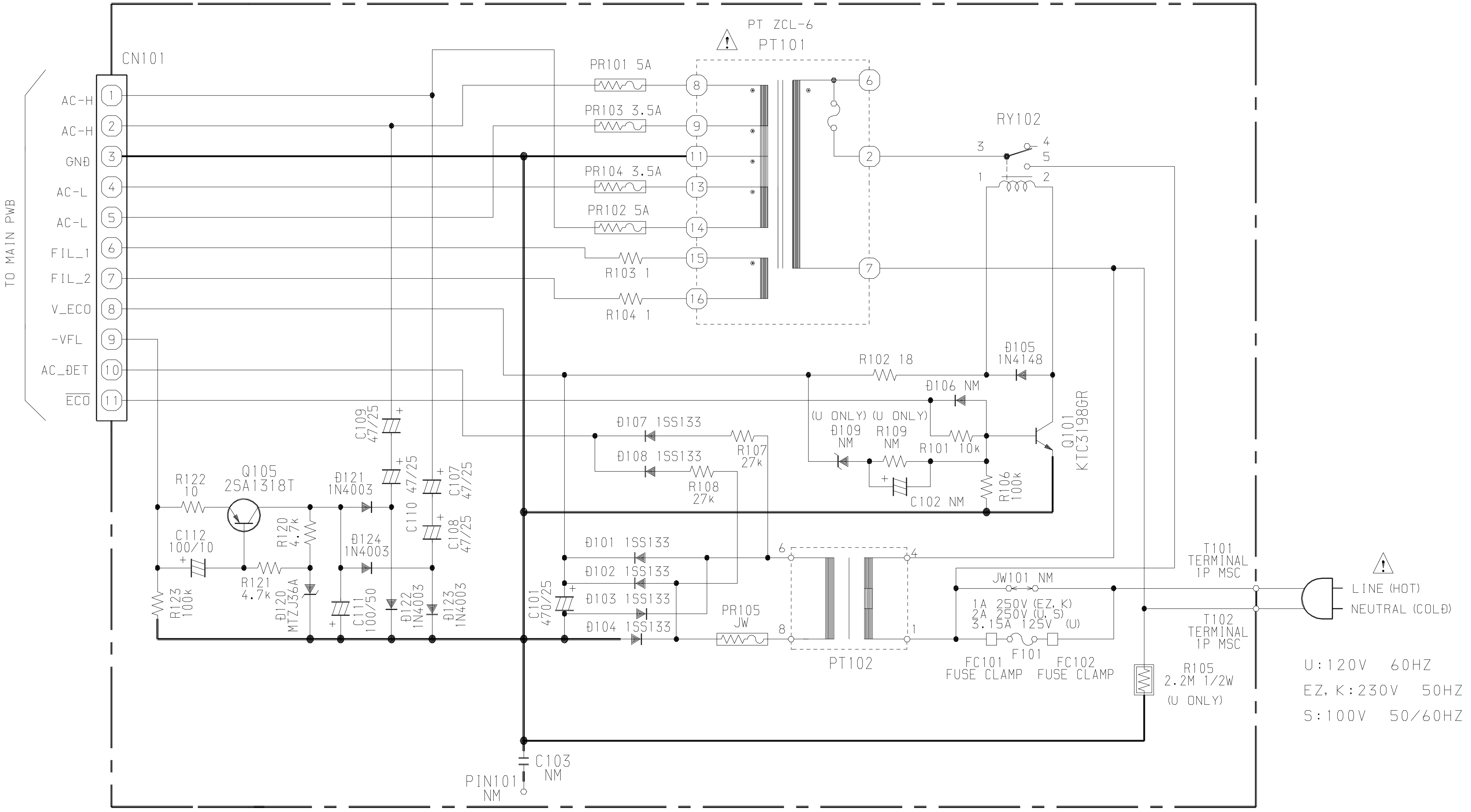
8Z CL6 636 01

ZCL-6

B-ZCL-6PT-RND.PT

11 01 99

SCHEMATIC DIAGRAM – 9 (PT) <EZ,K>


TO MAIN PWB
CN101
AC-H 1
AC-H 2
GND 3
AC-L 4
AC-L 5
FIL_1 6
FIL_2 7
V_ECO 8
-VFL 9
AC_DET 10
ECO 11
PT ZCL-6
PT101
PR101 5A
PR103 3.5A
PR104 3.5A
PR102 5A
R103 1
R104 1
8
9
11
13
14
15
16
6
2
7
RY102
3
4
5
1
2
R102 18
D105 1N4148
D106 NM
(U ONLY) (U ONLY)
D109 NM
R109 NM
R101 10k
C102 NM
R106 100k
Q101 KTC3198GR
D107 1SS133
D108 1SS133
R107 27k
R108 27k
R122 10
Q105 2SA1318T
C112 100/10
R121 4.7k
R120 4.7k
R123 100k
D120 MTZJ36A
C109 47/25
D121 1N4003
D124 1N4003
C110 47/25
C107 47/25
C108 47/25
C111 100/50
D122 1N4003
D123 1N4003
C101 470/25
D101 1SS133
D102 1SS133
D103 1SS133
D104 1SS133
PR105 JW
PT102
6
4
8
1
JW101 NM
1A 250V (EZ, K)
2A 250V (U, S)
3.15A 125V (U)
FC101 FUSE CLAMP
F101
FC102 FUSE CLAMP
R105 2.2M 1/2W (U ONLY)
T101 TERMINAL 1P MSC
T102 TERMINAL 1P MSC
LINE (HOT)
NEUTRAL (COLD)
U:120V 60HZ
EZ, K:230V 50HZ
S:100V 50/60HZ
C103 NM
PIN101 NM

SCHEMATIC DIAG (PT)

8Z CL6 635 01

ZCL-6 XR-M55, 56

11 01 99

B-ZCL-6PT-U-RND.PT

サービス技術ニュース	
番号	連絡内容
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